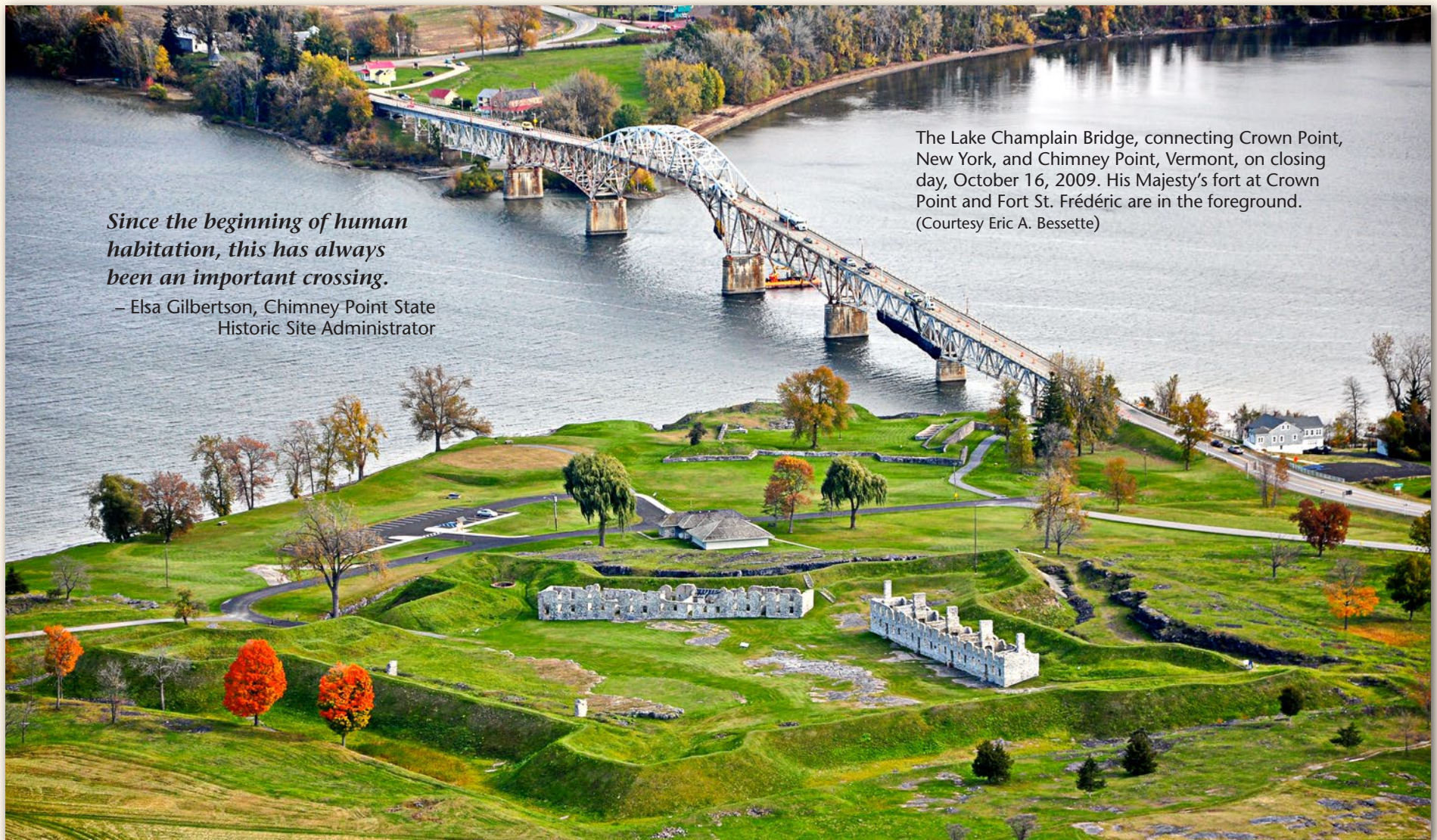




*Spanning the Decades*

# **The Lake Champlain Bridge Story**





*Since the beginning of human habitation, this has always been an important crossing.*

– Elsa Gilbertson, Chimney Point State Historic Site Administrator

The Lake Champlain Bridge, connecting Crown Point, New York, and Chimney Point, Vermont, on closing day, October 16, 2009. His Majesty's fort at Crown Point and Fort St. Frédéric are in the foreground.  
(Courtesy Eric A. Bessette)

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Prepared by the Lake Champlain Maritime Museum  
under contract to the New York State Department of Transportation.  
Published in 2012  
PRINTED IN THE UNITED STATES OF AMERICA





# *Spanning the Decades*

## **The Lake Champlain Bridge Story**



This booklet was prepared as part of a larger program of commemoration to mitigate the loss of the 1929 Lake Champlain Bridge. It was developed in response to Section 106 of the National Historic Preservation Act and was funded jointly by the New York State Department of Transportation, the Vermont Agency of Transportation and the Federal Highway Administration. The larger program also included the development of interpretive exhibits at both ends of the 2011 Lake Champlain Bridge, a documentary film –

*More Than Steel: The Lake Champlain Bridge Story*, oral histories, short films for museum exhibits, the *Lake Champlain Bridge: A Guide to Historic Resources*, Historic American Engineering Record (HAER) documentation and a website, [www.dot.ny.gov/lcbcommemoration](http://www.dot.ny.gov/lcbcommemoration). The overall program was guided and enriched by the efforts of the Ad Hoc Working Group for Commemoration, comprised of local historic preservation professionals and supporters.





*[Lake Champlain is] the most historic body of water in the Western Hemisphere: a silver dagger from Canada to the heartland of the American colonies that forged the destiny of France and England in America and the United States.*

– Ralph Nading Hill, Lake Champlain Historian

## Preface

**T**HE LAKE CHAMPLAIN BRIDGE was much more than the sum of its parts. When the bridge opened in 1929, connecting Crown Point, New York, to Chimney Point, Vermont, in the southern part of Lake Champlain, it was tangible evidence that the Champlain Valley had entered the modern era. The bridge became a regional landmark, a national engineering icon and, to those who lived nearby, a reliable friend.

Eighty years of ice and salt were not kind to the bridge's steel and concrete. The bridge's closure and demolition in 2009 due to safety reasons generated great personal hardship and deep sadness. In the smoke and fire of its explosion, the states of Vermont and New York united to remedy its absence and to commemorate its importance. These pages capture a glimpse of a bridge that unified a region. This is the story of the Lake Champlain Bridge.



1770s English map showing the English fort at Crown Point. (Courtesy Library of Congress)



# Chapter 1: A Strategic Location

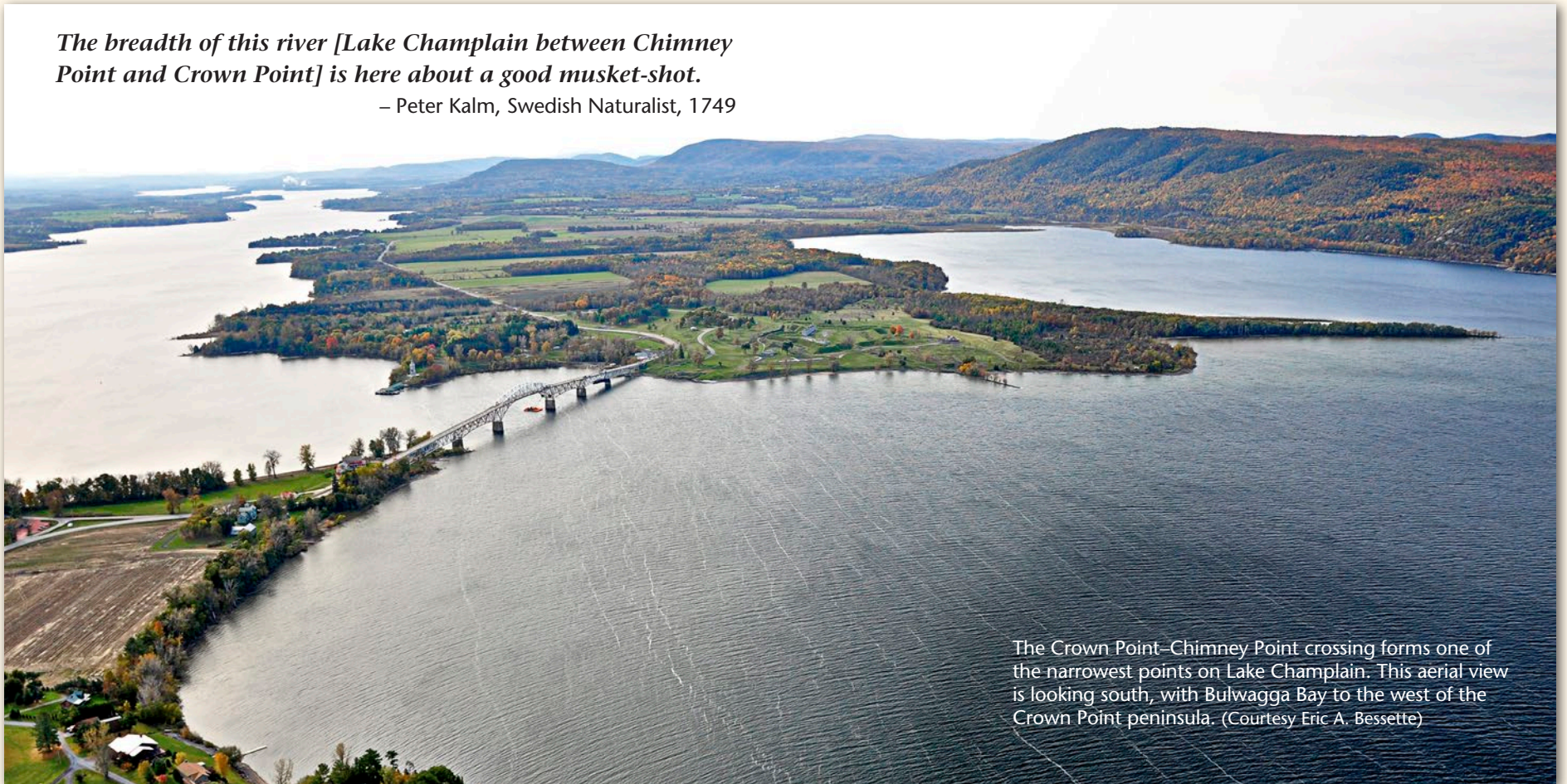
**L**AKE CHAMPLAIN IS A MAJESTIC BODY OF WATER THAT unites and divides the Champlain Valley. Between the Adirondack Mountains of New York to the west and Green Mountains of Vermont to the east, the lake stretches north across the border into Québec, Canada. An expanse of water 120 miles long and up to 12 miles wide, the lake has been both a travel corridor and natural barrier since the first inhabitants arrived in the area thousands of years ago.

The short crossing between Crown Point, New York, and Chimney

Point, Vermont, only 1,600 feet, has been strategically important throughout history. Native American peoples crossed in their canoes with relative ease for thousands of years, while European and Early American settlers shuttled people and livestock back and forth in large rowboats called bateaux. The site was a military post in the 17th and 18th centuries; since the 1800s, it has been a vital link between New York and Vermont via sail, horse and steam-powered ferries and, later, a bridge.

*The breadth of this river [Lake Champlain between Chimney Point and Crown Point] is here about a good musket-shot.*

– Peter Kalm, Swedish Naturalist, 1749



The Crown Point–Chimney Point crossing forms one of the narrowest points on Lake Champlain. This aerial view is looking south, with Bulwagga Bay to the west of the Crown Point peninsula. (Courtesy Eric A. Bessette)





## An Important Place for Many Millennia

**P**RIOR TO THE ARRIVAL OF THE FIRST Europeans to the area in 1609, Lake Champlain provided a means of travel, subsistence and spiritual inspiration for Native American people. Archaeological evidence indicates that Native American groups came together to trade goods, exchange ideas and share information at the Crown Point–Chimney Point crossing for more than 9,000 years. The location was valued for its excellent vantage point of the lake and for its proximity to such important materials as stone for making tools, clay for crafting pottery and wetlands for hunting and fishing.

When Europeans settled in North America in the late 17th and early 18th centuries, Lake Champlain became the tumultuous border area between the British colonies to the south and New France to the north. At remote but strategic Chimney Point, the British built a small fort in 1690 to monitor French activity on the lake. This early British presence was short-lived; the French ultimately established the earliest European settlement in the Champlain Valley at the Crown Point–Chimney Point crossing.

Lake Champlain during the American Revolution in 1777 as mapped by the British when the lake was being used as the invasion corridor for General John Burgoyne's 7,000-person army. (Courtesy Library of Congress)

English survey map from 1759 titled *Plan of the Fortress and dependent Forts at Crown Point with their Environs and part of Lake Champlain*. (Courtesy Library of Congress)



### SCALES for the PLAN.

A Scale of Feet 600 to an Inch.

A Scale of Yards 200 to an Inch.

A Scale of a Furlong or a Mile.

PLAN of the  
FORTRESS and dependent FORTS  
at CROWN POINT with  
their Environs and part of  
LAKE CHAMPLAIN.  
— 1759 —

### REFERENCES.

- a. The Point.
- b. The French Fort.
- c. The English Fort.
- d. The French Fort.
- e. The French Fort.
- f. The French Fort.
- g. The French Fort.
- h. The French Fort.
- i. The French Fort.
- j. The French Fort.

NB. The separate Plans to the Point and the part of the West of the Point are not shown here.





For millennia, Lake Champlain formed the boundary between the Iroquois tribes to the west and the Algonquin-speaking Wabanaki Confederacy to the east. The Abenaki people (members of the Wabanaki Confederacy) call Lake Champlain "The Lake Between;" the Mohawks (members of the Iroquois Confederacy) refer to it as "The Gateway to the Country." (Engraved for the Ladies Repository Magazine by R. Hinshelwood, after a painting by D. Johnson, courtesy Lake Champlain Maritime Museum)



Samuel de Champlain was the first European explorer of the region, arriving in 1609. He named Lake Champlain in his honor and fought in a skirmish against an Iroquois war party with his Algonquin allies. This image, which he drew, is the only known contemporary representation of Samuel de Champlain. (Samuel de Champlain, *Œuvres de Champlain*/2nd edition. Québec: G.-É. Desbarats, 1870. Vol. 3)

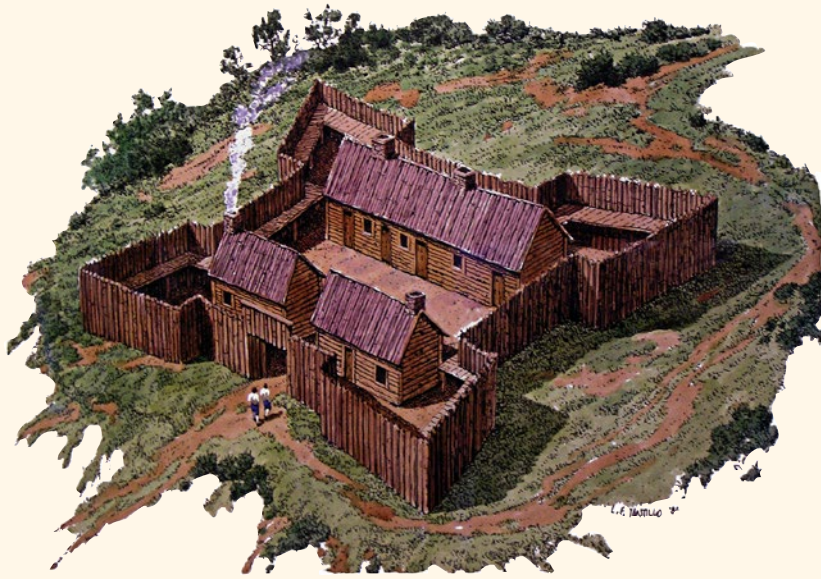
*The Indians call this place Tek-ya-dough-nigarigee, that is, the two points immediately opposite to each other...While we staid [sic] there we were very agreeably surprised...with the sight of a large birch canoe upon the lake, navigated by two or three Indians in the dresses of their nation. They made for the shore and soon landed; and shortly after another party, amounting to six or seven, arrived, that had come by land.*

— Issac Weld, traveler, circa 1796



Native American stone tools from 3,000–4,000 years ago were unearthed at Chimney Point in 2010 during archaeological excavations for the construction of the new Lake Champlain Bridge. (Courtesy University of Vermont Consulting Archaeology Program, Burlington, Vermont)



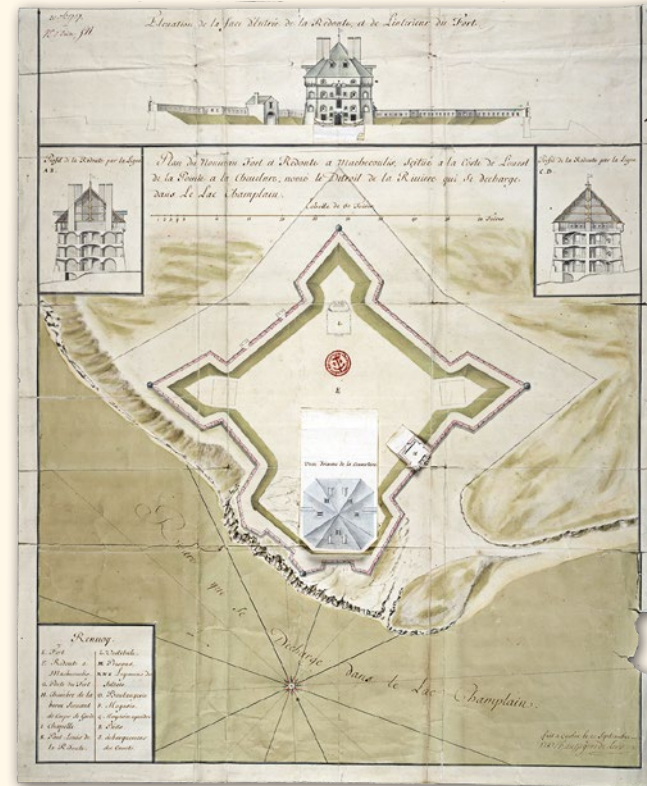


Artist's depiction of the 1731 French fort built at present-day Chimney Point in Addison, Vermont. (Courtesy Crown Point State Historic Site)

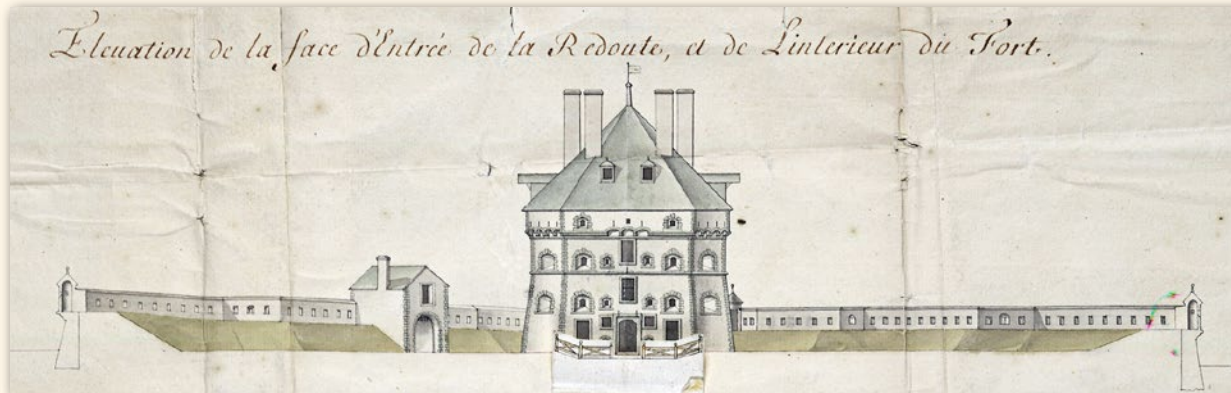
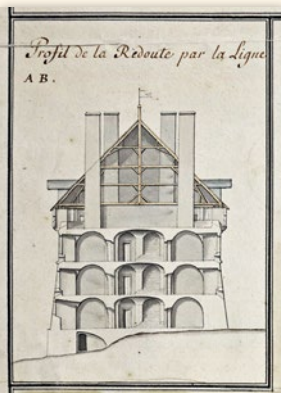
**T**O MAINTAIN CONTROL OF THE LAKE PASSAGE TO Canada, the French built a wooden stockade fort at Pointe-à-la-Chevelure (later to be called Chimney Point) in 1731. It was used until the larger Fort St. Frédéric, on the west side of the lake, was completed in 1737. Fort St. Frédéric, with its five-story tower and thick stone walls, was imposing. In the decades following the fort's completion, the French settlement of the area grew to more than 150 soldiers, farmers and their families.

*[Fort St. Frédéric] is built on a rock...is nearly quadrangular, has high and thick walls, made of...lime-stone. On the eastern part of the fort is a high tower, which is proof against bombshells, provided with very thick and substantial walls, and well stored with cannon from the bottom almost to the very top.*

— Peter Kalm, Swedish Naturalist, 1749



Fort St. Frédéric, completed in 1737, was built by the French to control Lake Champlain and to prevent British colonization of the region. (Courtesy French National Archive)









## Getting Across: Before There was a Bridge

**A**FTER THE AMERICAN REVOLUTION, BENJAMIN PAINE built a tavern at Chimney Point and began the earliest known ferry service around 1785. A sail ferry made the crossing to Crown Point, but soon expanded to Port Henry, New York. Ferry service between Chimney Point and the New York side of the lake remained in operation for 244 years.

In 1821, the Barnes family purchased the tavern and farm at Chimney Point. The family modernized the sail ferry crossing with the horse ferry *Experiment* around 1826. No longer reliant on wind and weather, the horse ferry offered faster and more reliable service. The *Experiment* connected Port Henry and Chimney Point but made detours as needed at Crown Point. Horse ferries dominated this crossing until 1890, making it the longest running horse ferry crossing on Lake Champlain.

Steamboats replaced the horse ferries at this location in 1890 when the steamer *G. R. Sherman*, operated by the Port Henry Steamboat Company, began service between Chimney Point and several destinations on the New York side. A larger ferry landing was constructed at Chimney Point to accommodate the 75-foot vessel that ran daily for nearly 40 years, only ceasing operations the day the Lake Champlain Bridge opened in 1929.



Sail ferries, like this one captured by Vergennes, Vermont, artist Custer Ingham, operated at the lake's narrow crossings for decades before horse, steam, diesel ferries and even bridges replaced them. (Courtesy private collection, used by permission of the owner)



Moses Bradley owned and operated a redware pottery shop on Chimney Point from about 1791–1797. During construction of the new Lake Champlain Bridge, a large collection of artifacts related to a kiln and to pottery production was uncovered, revealing the exact location of his operation. (Courtesy University of Vermont Consulting Archaeology Program, Burlington, Vermont)

**CHIMNEY POINT & PORT HENRY FERRY.**

**The Four Horse Boat Gipsy will Leave**

CHIMNEY POINT, VT.,	PORT HENRY, N. Y.,
At 7 o'clock, A. M.	At 8 o'clock A. M.
" 12 " M.	" 2 " P. M.
" 5 " P. M.	" 6 " P. M.

**ON SUNDAY ONLY TWO TRIPS.**

LEAVE CHIMNEY POINT.	LEAVE PORT HENRY, N. Y.,
At 9 o'clock, A. M.	At 10 o'clock, A. M.
" 3½ " P. M.	" 4½ " P. M.

Will run as above through the season unless notice is given to the contrary.

Chimney Point, Vt., May 2d, 1859. **A. BARNES, JR.**

Propelled by paddlewheels powered by horses, horse ferries were ideal for short crossings on lakes and rivers. (Courtesy Chimney Point State Historic Site)

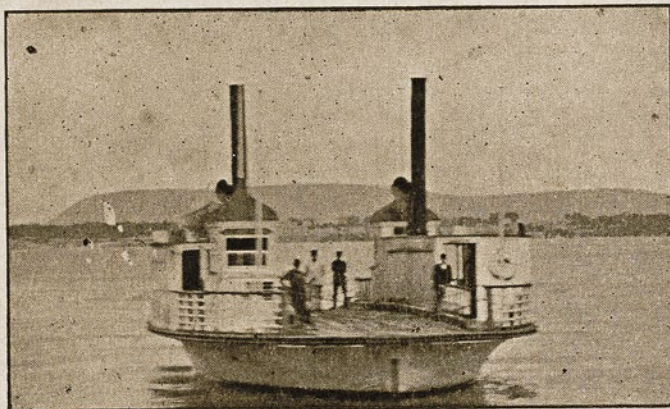


1890

PORT HENRY, N. Y.

June 1917

## The STEAM FERRY BOAT G. R. SHERMAN



Will run until further notice on the following timeschedule  
Landing at Fort Frederic, Crown Point, each trip on signal.

Leave Port Henry, N. Y.		Leave Chimney Point, Vt.	
Trip No. 1	7:30 A. M.	Trip No. 1	8:00 A. M.
" 2	9:30	" 2	10:00
" 3	11:30	" 3	12:00 M.
" 4	1:30 P. M.	" 4	2:00 P. M.
" 5	3:30	" 5	4:00
" 6	5:00	" 6	5:30
" 7	6:00	" 7	6:30

### SUNDAY SCHEDULE

Trip 1 will leave Port Henry, at 8:00 A. M. Chimney Point, 8:30 A. M. Other trips same as week days.

On and after September 15, Trip No. 7 will be discontinued.

On and after October 1, Trip No. 6 will be discontinued, and Trip No. 5 will leave Port Henry at 4:00 P. M. and Chimney Point at 4:30 P. M.

### FARE

Passengers, 15c	Single Team, 40c	Double Team, 65c
	Automobiles, 65c	

### Between Fort Frederic and Chimney Point

Passengers, 15c	Single Team, 30c	Double Team, 40c
	Automobiles, 40c	

Excursion rates for parties of twenty or over, going and returning on regular trips, 20 cents round trip.

S. F. MURDOCK, Pres.

H. E. KIDDER, Sec. and Treas.

Notice change of time Sept. 15 and Oct. 1



From 1825–1934, the Chimney Point post office was a social hub where land and water transportation met. An inn and tavern provided travelers with a place to rest. (Courtesy Chimney Point State Historic Site)



Captain Weatherwax (center) and the crew of the steamer G. R. Sherman. (Courtesy Lake Champlain Maritime Museum)

The 75-foot steam ferry G. R. Sherman provided passengers with a protected cabin, increased cargo capacity and room for two wagonloads of hay or four horse-drawn buggies or, later, four cars. (Courtesy Chimney Point State Historic Site)

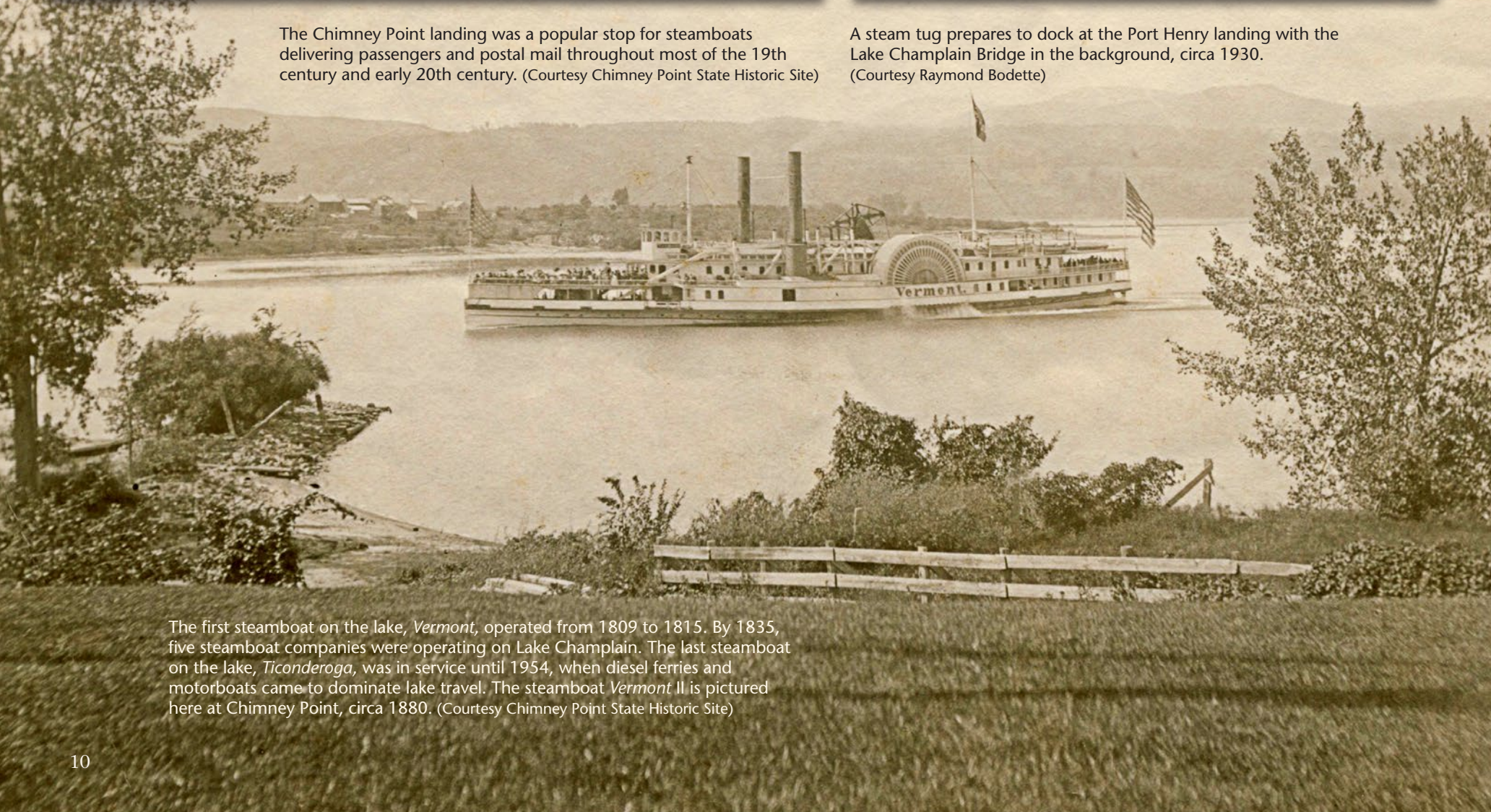




The Chimney Point landing was a popular stop for steamboats delivering passengers and postal mail throughout most of the 19th century and early 20th century. (Courtesy Chimney Point State Historic Site)



A steam tug prepares to dock at the Port Henry landing with the Lake Champlain Bridge in the background, circa 1930. (Courtesy Raymond Bodette)



The first steamboat on the lake, *Vermont*, operated from 1809 to 1815. By 1835, five steamboat companies were operating on Lake Champlain. The last steamboat on the lake, *Ticonderoga*, was in service until 1954, when diesel ferries and motorboats came to dominate lake travel. The steamboat *Vermont II* is pictured here at Chimney Point, circa 1880. (Courtesy Chimney Point State Historic Site)



## Here Come the Cars

**A**S THE 20TH CENTURY DAWNED, steamboats and railroads faced a new competitor as an increasing number of vacationers came to the Champlain Valley by automobile. By 1925, excursion steam vessels were converted to carry cars and public demand for highway and bridge projects grew.

It was during this time that the proposal for a bridge across Lake Champlain gained momentum as the public began to push the idea in the local media. A bridge across Lake Champlain would soon be a reality.

By 1929, nearly 30 million motor vehicles were on the road in America—one for every five Americans.  
(Courtesy Lake Champlain Maritime Museum)



Ferries on Lake Champlain were the only regular means of cross-lake travel for cars for many years. The *Admiral*, pictured here on August 15, 1929, is loaded with cars traveling from Port Douglas, New York, to Burlington, Vermont.  
(Courtesy Lake Champlain Maritime Museum)

Right: Journalist C. F. Peterson of Port Henry, New York, is credited with first dreaming of the idea of a bridge connecting Crown Point, New York, to Chimney Point, Vermont, through his 1922 news articles and editorials.  
(Courtesy Special Collections, University of Vermont Libraries)

## CHAMPLAIN BRIDGE DREAM COMES TRUE

Editor C. F. Peterson of Port  
Henry Started Agitation for  
Span In '22—Appointed  
Publicity Director

(Special to the Free Press)

TICONDEROGA, N. Y., July 11.  
—The announcement last week by the Champlain Bridge Commission that the opening of the Champlain bridge will take place on Monday, August 26, will mark the fruition of the dream of C. F. Peterson, Port Henry newspaper man. Mr. Peterson was on Monday appointed publicity director of the Champlain Bridge Commission. He was notified of his appointment by former Senator M. Y. Ferris, chairman of the Lake Champlain Bridge Commission.

All news stories, advertising and other publicity pertaining to the bridge opening will be in charge of Mr. Peterson personally.

Back in April 1922, Mr. Peterson first dreamed the possibility of bridging Lake Champlain between Chimney Point, Vt., and Crown Point, N. Y. He started an agitation through the Essex County News, the paper he represents in Port Henry. Through this source other papers picked up the subject and it was not long before there was a demand for the bridge.

Mr. Peterson also enlisted the various State, county, sectional, community, civic and fraternal organizations to bombard the two legislatures for the bridge, and in 1925 the two legislatures created a joint commission to study the feasibility and other matters entering into such a project, as well as sites, because after Mr. Peterson had created a demand for a bridge other communities along the southern end of the lake expressed their desire for the bridge at their particular locality. The investigation in 1925 resulted in a further investigation in 1926. The State of New York appropriated \$25,000 for soundings and incidental expenses. On December 28, 1926, a final report was made recommending the Chimney Point, Vt., and Crown Point, N. Y., site. Mr. Peterson served as secretary of the joint legislative committee during the investigation.

The Lake Champlain bridge commission recognizing Mr. Peterson's work appointed him to the position of publicity director. They feel that the man who brought about the erection of the bridge is the man now to put the bridge before the public. Friends of Mr. Peterson state it is doubtful whether a bridge would ever span Lake Champlain had it not been for his vision and foresight, and his consistent efforts of publicity and labor in an effort to get legislative recognition. It is without doubt that Mr. Peterson will be just as consistent in





This line of cars waiting at the Burlington, Vermont, to Port Kent, New York, ferry crossing, circa 1925, illustrates the delays motorists experienced as automobile ownership increased. (Courtesy Lake Champlain Transportation Company)



## Chapter 2: Bridging Lake Champlain

*The ever increasing volume of highway traffic and the reliance upon the motor vehicle as a means of transportation make it essential that proper facilities be provided for its accommodation continuously throughout the twelve months of the year.*

– Lake Champlain Bridge Commission 1929 Report

**I**N THE 1920S, CHAMPLAIN VALLEY RESIDENTS, BUSINESSES and visitors became increasingly frustrated with the pace of travel at ferry crossings. Although there were 17 ferry crossings on Lake Champlain at the time, few operated at night, all had lengthy summertime delays and winter ice shut them down. A legislative report declared this an “intolerable situation” that could be remedied only by bridging the lake to provide a quick, safe, 24-hour, year-round crossing. With initial legislative appropriations of \$200,000 from each state, the Lake Champlain Bridge Commission was established and bridge plans were under way in 1927.

Where to put the bridge was debated intensely. Ferry crossing locations up and down the lake were considered. Communities held public hearings on both sides of the lake and there was lively involvement from local chambers of commerce, motor clubs and tourism organizations. The popular ferry crossing between Ticonderoga, New York, and Larrabees Point, Vermont, at the southern end of the lake was a top contender, although the State of Vermont favored a northern site near Plattsburgh, New York. Ultimately, bedrock and the budget dictated the bridge location.

Of the six proposed bridge locations, geologic testing concluded that the Crown Point, New York, to Chimney Point, Vermont, crossing was the most cost-effective place to build a bridge. The Bridge Commission hired Boston engineering firm Fay, Spofford & Thorndike to provide bridge plans and estimates for the site. The selected bridge design was a 14-span continuous truss bridge estimated to cost nearly \$1 million.

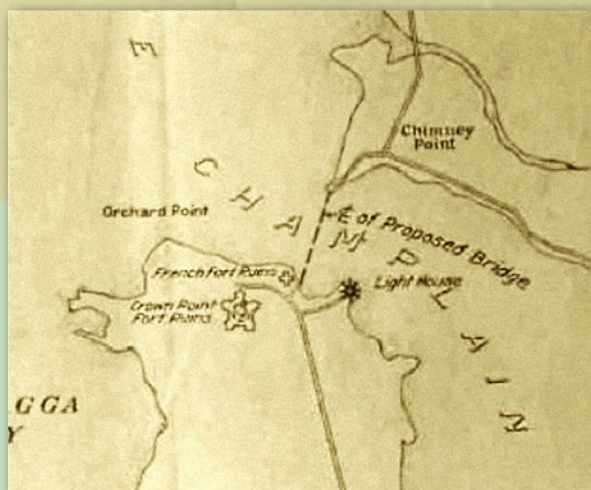
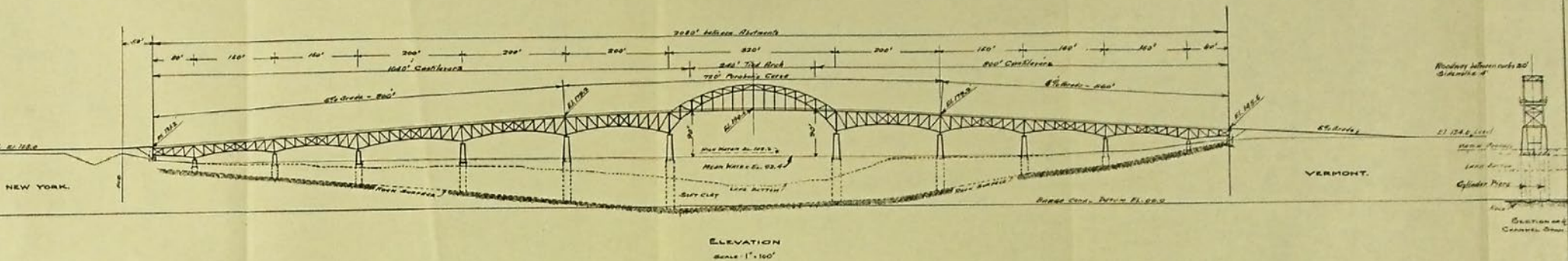
*...the historic importance of the site and the fact that the bridge would be conspicuous for many miles on account of its height made its appearance of special importance.*

– Charles M. Spofford, principal designer of the Lake Champlain Bridge



People from around the lake met to discuss the need for a bridge across Lake Champlain and to voice their opinions on where it should go. The community of Port Henry, New York, favored the Crown Point–Chimney Point crossing. (Courtesy Moriah Historical Society)





Prepared by the Department of State Engineer and Surveyor  
at the request of the  
Lake Champlain Bridge Joint Legislative Committee.

Dec. 15<sup>th</sup>, 1926. Roy G. Jones  
State Engineer and Surveyor

STATE OF NEW YORK.  
DEPARTMENT OF STATE ENGINEER AND SURVEYOR.  
PROPOSED BRIDGE ACROSS LAKE CHAMPLAIN.  
PRELIMINARY SKETCH.  
LOCATION NO. 1. HIGH LEVEL BRIDGE.  
FORT FREDERICK RUINS, NEW YORK,  
CHIMNEY POINT, VERMONT.

Above: New York State Engineer's Office 1926 bridge concept for the Crown Point (referred to as Fort Frederick) and Chimney Point crossing was the inspiration for bridge designer Charles Spofford's engineering innovation for the 1929 Lake Champlain Bridge. (Courtesy Vermont State Archives and Records Administration)

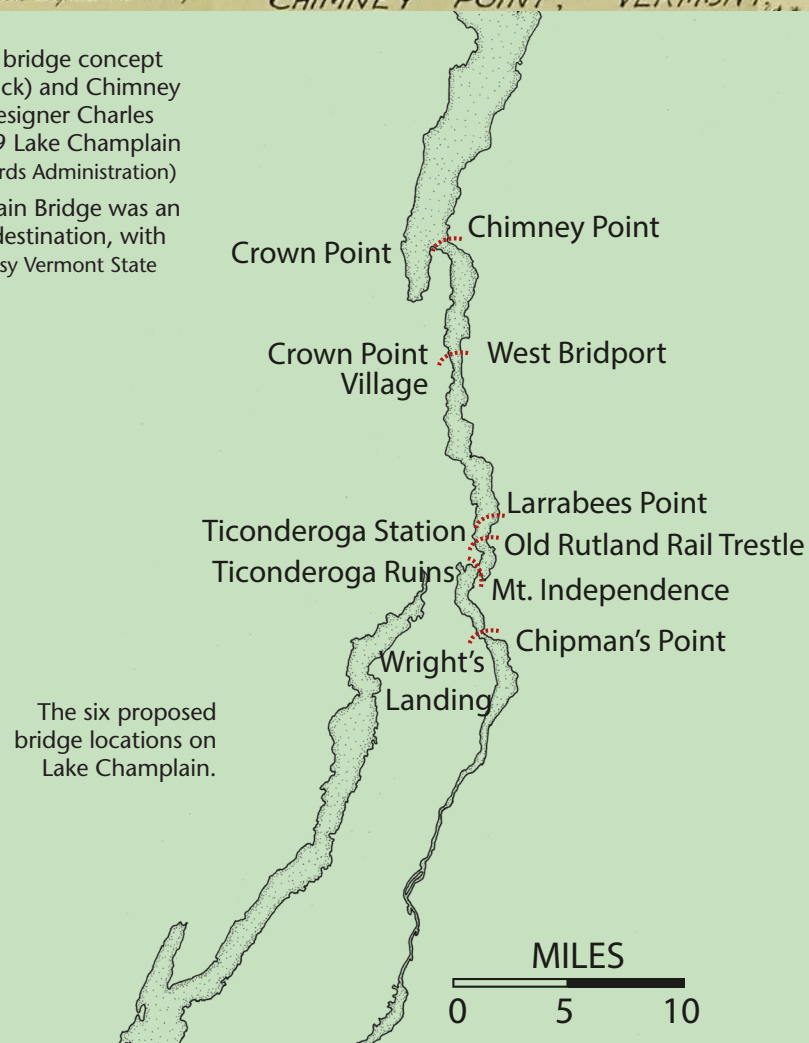
Left: The chosen location for the Lake Champlain Bridge was an established ferry crossing and popular tourist destination, with historic sites and campgrounds to visit. (Courtesy Vermont State Archives and Records Administration)

## THE BEST CHOICE

### NEW YORK STATE OVERSAW THE PRELIMINARY PLANNING FOR A BRIDGE

across Lake Champlain in 1926. With \$25,000 in federal funding, lake-bottom tests at six proposed bridge sites at the southern end of Lake Champlain were carried out by New York State geologists in April of that year. Shallower bedrock allows easier and cheaper securing of bridge piers, so depth to bedrock at each proposed site was critical. Borings indicated that all the locations, except Crown Point, New York, to Chimney Point, Vermont, had deep lake sediments with bedrock below reasonable depths.

New York also hired one of the nation's most distinguished bridge engineers of the time, J. A. L. Waddell, to develop bridge concepts and give cost estimates for three of the possible bridge locations. Waddell's figures showed that a multispan bridge between Crown Point, New York, and Chimney Point, Vermont, at an estimated \$920,000, would be most cost-effective when compared to the \$1,070,000 and \$1,450,000 price tags for suspension bridges at Ticonderoga-Larrabees Point and Wright's Landing-Chipman's Point, respectively.



The six proposed bridge locations on Lake Champlain.



## LAKE CHAMPLAIN BRIDGE COMMISSION

### ON MAY 11, 1927, A COMPACT WAS APPROVED BETWEEN

New York and Vermont creating the Lake Champlain Bridge Commission. The Commission was given full power to purchase, construct, own, maintain and operate a highway bridge across Lake Champlain; to borrow money; and to secure it by bonds or mortgages on any property held or acquired by the Commission. Responsibilities were split between the states: 60 percent New York and 40 percent Vermont. The original six-member Commission consisted of Chairman Mortimer Y. Ferris, Albert E. Phelps and Marion L. Thomas from New York State and Vice-Chairman George Z. Thompson, Charles E. Schoff and William R. Warner from Vermont.

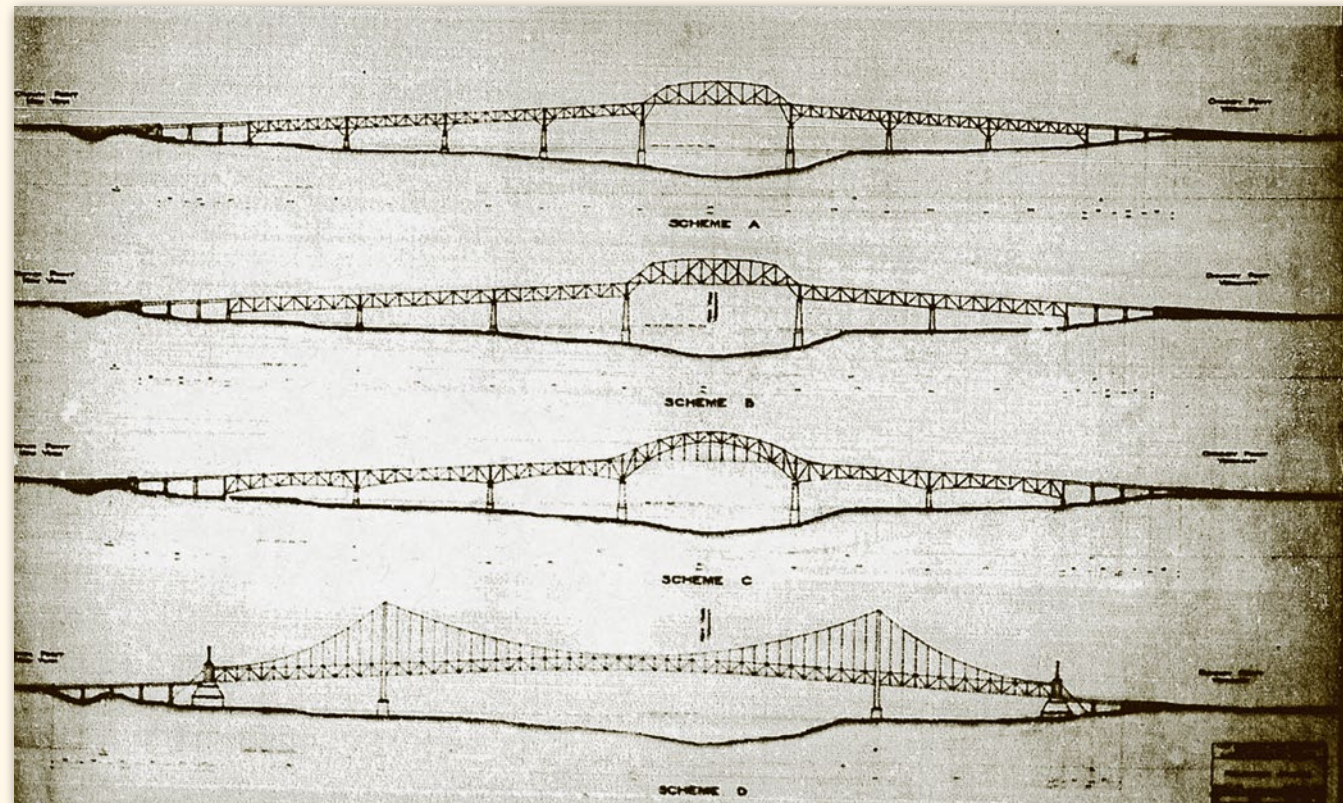
The original Lake Champlain Bridge Commissioners at Fort St. Frédéric with the 1929 Lake Champlain Bridge in the background.  
(Courtesy Vermont State Archives and Records Administration)



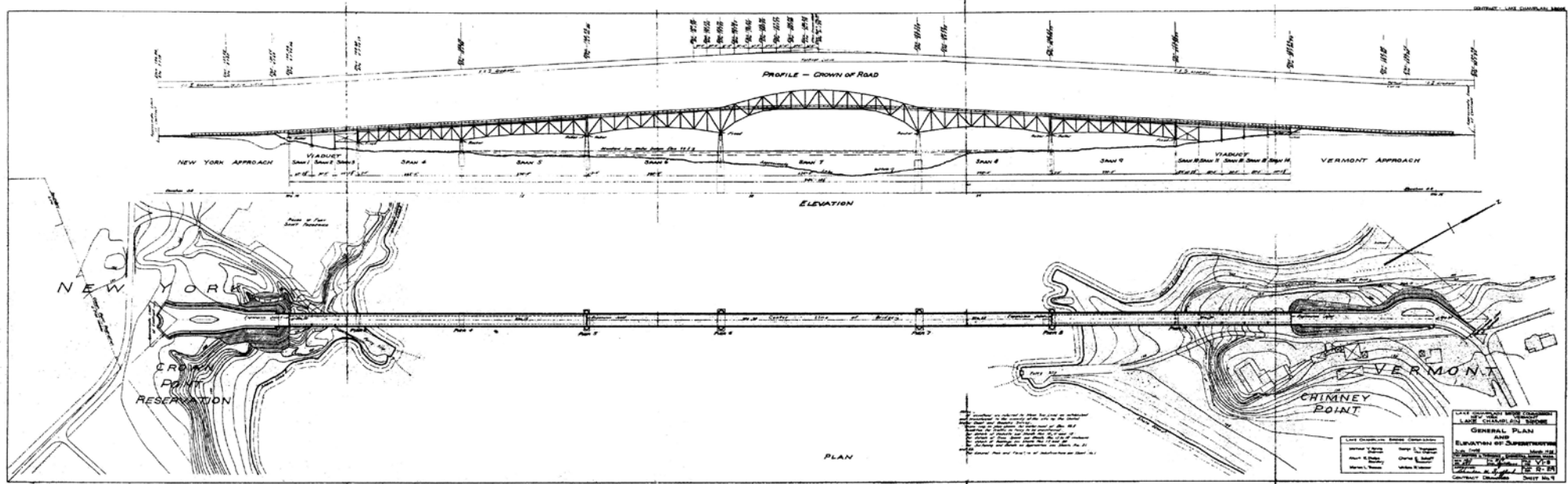
## Choosing a Design

**FAY, SPOFFORD & THORNDIKE** developed four bridge designs for the Crown Point–Chimney Point crossing. The continuous truss bridge design was selected by the Lake Champlain Bridge Commission because of its beauty and cost-effectiveness. It was 2,186 feet in length, with a 434-foot arched channel span and five under-deck truss spans, supported by six channel piers. At an estimated cost of under \$1 million, this design fit within the construction budget set by the Lake Champlain Bridge Commission.

Four proposed bridge types by Fay, Spofford & Thorndike. Schemes A, B and C are truss bridges and Scheme D is a suspension bridge. The aesthetic appeal of Scheme C, with its graceful curving arch and fluid profile, is evident when compared to other proposed truss bridge forms. (Courtesy New York State Archives)







## FAY, SPOFFORD & THORNDIKE

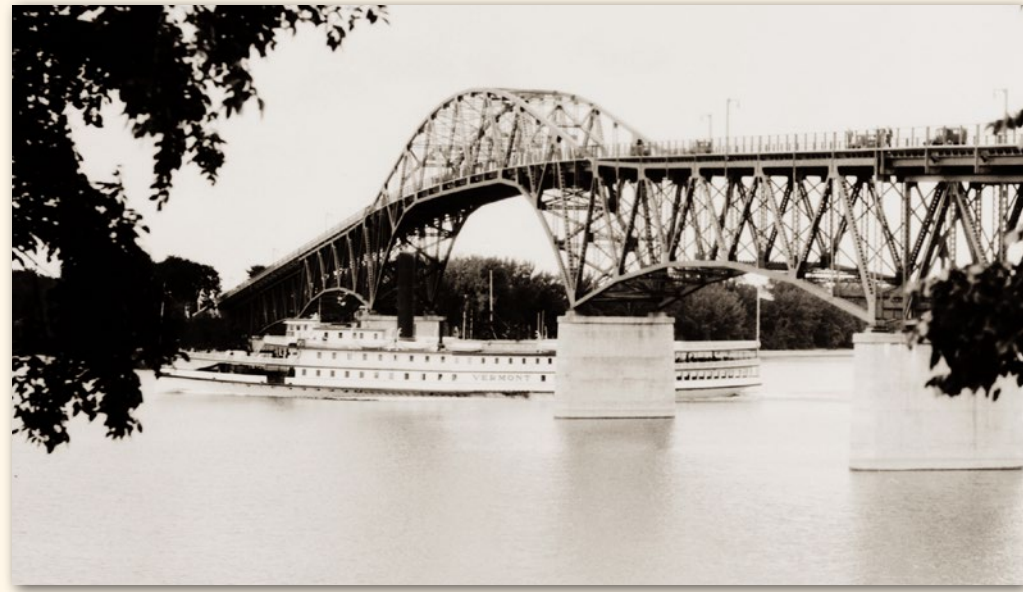
### THE FIRM OF FAY, SPOFFORD & THORNDIKE

was established in 1914 by three civil engineering graduates from the Massachusetts Institute of Technology (MIT): Frederic H. Fay, Charles M. Spofford and Sturgis H. Thorndike. While all played a part in the Lake Champlain Bridge project, Spofford was the main designer. Spofford was a professor of civil engineering at MIT until his retirement in 1954. In addition to his teaching and consulting work, Spofford wrote several engineering textbooks, including his 1937 work titled *The Theory of Continuous Structures and Arches* and a subsequent edition titled *The Theory of Structures*.



Charles M. Spofford, designer of the 1929 Lake Champlain Bridge. (Courtesy Fay, Spofford & Thorndike)

The 1929 engineering plans for the selected bridge design by Fay, Spofford & Thorndike. Inspired by an earlier rendition of a bridge by the New York State Engineer's Office, Spofford's innovative engineering made the arching through truss a reality. (Courtesy Vermont State Archives and Records Administration)



The recommended vertical channel clearance of 90 feet was based on the height needed to clear the smokestack of the steamer *Vermont III* at extremely high water level. (Louis L. McAllister Photographs, courtesy Special Collections, University of Vermont Libraries)



## Fitting In

*It was almost surgical how they had built the bridge in and amongst this archaeological site... effectively preserving everything else outside of these small disturbances that were used for the piers.*

– John Crock, University of Vermont Consulting Archaeologist

**T**HE DESIGN OF THE LAKE CHAMPLAIN BRIDGE ADDRESSED the challenges presented by the geological and cultural features of its location. Its arching truss form provided the vertical clearance needed for vessels with tall smokestacks while complementing its scenic setting. On land, the bridge approaches needed to avoid undue impact to the historic sites and private properties at Chimney Point, Vermont, and Crown Point, New York.

Bridge engineers sensitively located the bridge to minimize impacts to historic sites in an era when these properties did not have the same protection they have today. Placement of the bridge on the New York side skirted the ruins of the east bastion of Fort St. Frédéric (1737) that were still visible. Across the lake in Vermont, the Chimney Point tavern and surrounding property were privately owned until 1966. The site of the earlier French fort at Chimney Point (1731) was purchased from the landowner for the bridge approach but lacked any visible ruins. Thankfully, tons of fill were used on the Vermont side to build up the approach to the bridge spans over Lake Champlain, preserving the undiscovered archaeological remains of the 1731 French fort.

Both states' historic sites were listed later on the National Register of Historic Places and both Fort St. Frédéric and Fort Crown Point, in the Crown Point State Historic Site, are designated National Historic Landmarks.



At Chimney Point, the bridge was less than 60 feet from the 1780s Chimney Point Tavern. The fill placed on the Vermont approach can be seen here, with the tavern in the upper left-hand corner. (Courtesy Chimney Point State Historic Site)



As seen in these two photos of Crown Point, the bridge was built less than 10 feet from the east bastion of Fort St. Frédéric. (Above, Louis L. McAllister Photographs, courtesy Special Collections, University of Vermont Libraries; below, courtesy Eric A. Bessette)





## An Engineering Landmark in the Making

**T**HE LAKE CHAMPLAIN BRIDGE WAS THE FIRST LONG highway bridge in the United States to use continuous truss technology, creating a graceful transition between the under-deck approach trusses and the arching above-deck through truss. The combined use of deck trusses and a through truss provided greater height at the center channel, while the deck trusses, with shorter piers, reduced costs for the approaches. Spofford's design presented the perfect balance of visual appeal and engineering innovation. The bridge had to accommodate the height requirements of boats navigating the lake while minimizing the visual impact on the scenic setting and avoiding overly steep approach grades.

On a national scale, the Lake Champlain Bridge represented the intersection of four major bridge trends at the time of its design and construction. First, it employed continuous truss technology. Second, it addressed the debate within the engineering community regarding the aesthetics of bridge design and especially the aesthetics of truss bridges. Third, it employed the use of cantilevers in truss design to extend span length, reduce construction costs and address aesthetic concerns. Lastly, it was a thoughtful engineering response to rapidly increasing travel by automobiles in scenic destinations. Spofford's ability to expand the engineering world's understanding of how bridges could meet all of these blossoming needs resulted in an engineering landmark that has inspired bridge designs across North America.

The Lake Champlain Bridge combined many advances in truss bridge design into one structure. The approach spans are deck trusses; the channel span is an arching through truss; and the bridge was erected using trussed cantilevers.  
(Courtesy Chimney Point State Historic Site)

*Charles Spofford created something incredibly unique when he designed the Crown Point Bridge...This was the first continuous truss that had a free form, that essentially developed from really an under-deck truss, to then almost an arch...then back to an under-deck truss. So this freeing the form of an arch, in my view, was a huge development in the design of trusses.*

– Theodore “Ted” Zoli, III,  
engineer and designer of the new Lake Champlain Bridge



The juncture of the two truss types usually resulted in a visually awkward transition. Spofford remedied this by introducing a curving form from the deck truss to the through truss. This innovative approach created the attractive curving transition.  
(Louis L. McAllister Photographs, courtesy Special Collections, University of Vermont Libraries)







The structure visually complemented the natural and historic setting.  
(Courtesy Moriah Historical Society)



With the bridge arch complete, the traditional steamboats could still travel on their excursions past historic Crown Point and Chimney Point.  
(Courtesy Hammond Library, Crown Point, New York)

## WHAT IS A TRUSS?

**A TRUSS INVOLVES A SERIES OF TRIANGULAR FRAMES JOINED** together to form a single beam. Trusses allow stresses to be distributed evenly, reducing the amount and weight of material required and, thus, construction cost. In the 19th century, truss bridges primarily served the rail-roads and were considered utilitarian in their design. The aesthetic qualities of truss bridges were not fully developed until the early 20th century, when the use of steel allowed more curving lines and the demands of automobile travel necessitated more bridges.



Prior to the 20th century, truss bridges were considered more utilitarian than visually appealing, illustrated here by this above-deck truss in Montpelier, Vermont. (Courtesy Fitzgerald & Halliday, Inc.)

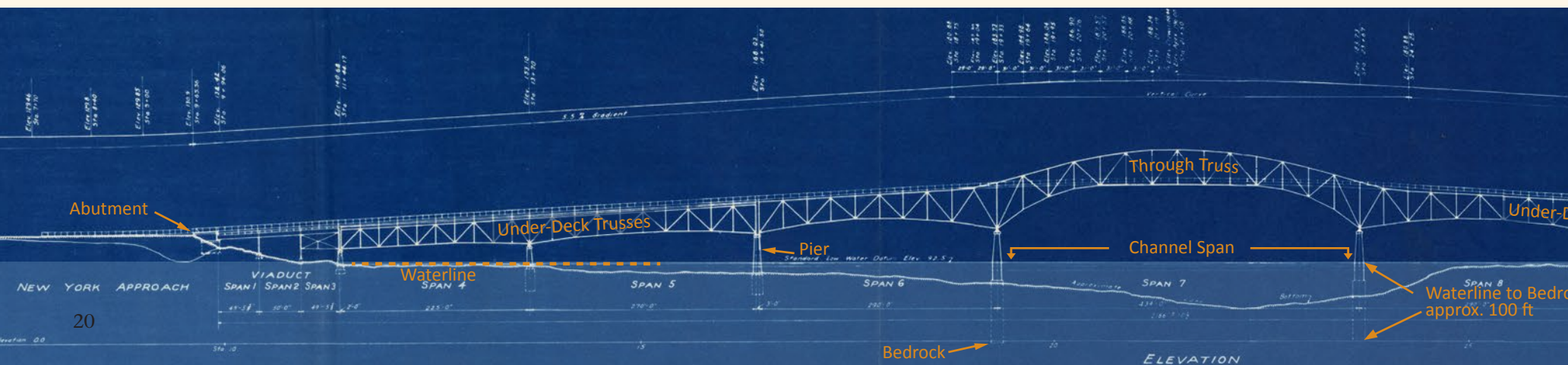


The visual appeal of the bridge was undeniable from any angle.  
(Courtesy Crown Point State Historic Site)





The Lake Champlain Bridge was 2,186 feet in length, consisting of 14 spans supported on concrete piers and abutments. Construction contracts were separated into substructure (piers and abutments) and superstructure (steel frame, approaches and decking). Below is the actual 1929 bridge blueprint with annotations added. (Top, courtesy Vermont State Archives and Records Administration; below, courtesy Erwin Clark)





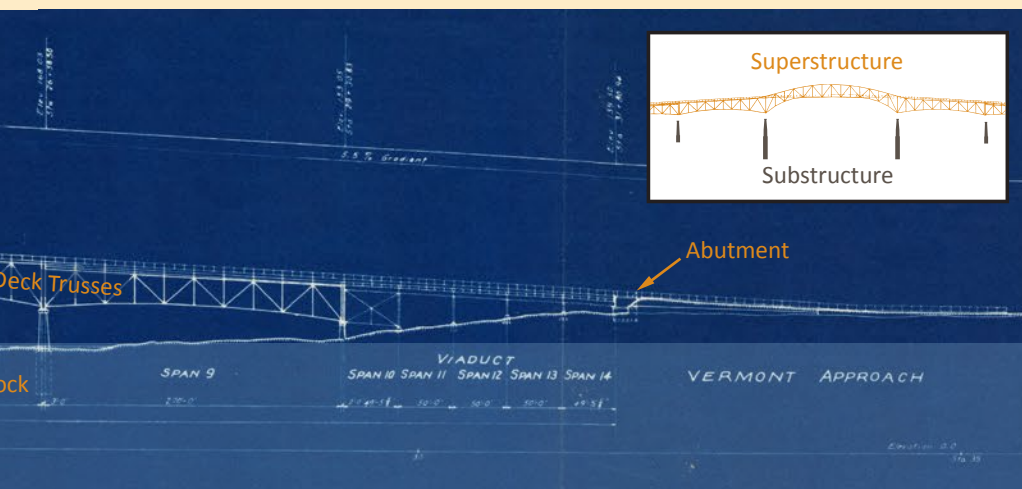
# Chapter 3: A Bridge is Born

*Construction houses, machinery and great numbers of bridge workers have transformed the quiet lakeside spot into a center of activity, and the noise of construction work rivals that of a city.*

– *Ticonderoga Sentinel*, August 30, 1928

**C**ONSTRUCTION OF THE LAKE CHAMPLAIN BRIDGE WAS completed in an astonishing 14 months, from June 1928 to August 1929. The Bridge Commission publicized the contracts for the work in April 1928. Without an acceptable bid for the entire project, the Commission contracted out the work in pieces. The winning contractors worked swiftly, with relatively mild temperatures that winter, achieving more rapid progress than expected.

Contract	Contractor	Bid
Substructure	Merritt-Chapman and Scott Corporation, New York City	\$385,000
Superstructure	American Bridge Company, New York City	\$535,177.06
Lighting	Alvin E. Bennett, Crown Point, New York	\$9,450
Total Actual Cost		\$929,627.06



## WHO BUILT THE BRIDGE?

### MERRITT-CHAPMAN AND SCOTT

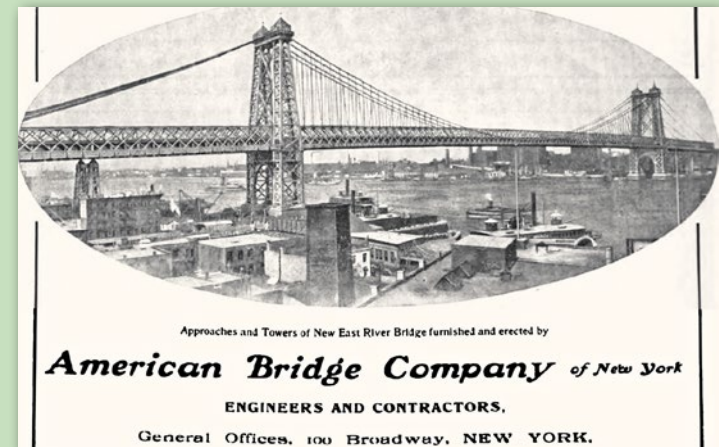
of New York City was a large firm specializing in marine salvage and port and harbor development projects. In 1929, the company employed more than 2,500 people, including more than 40 divers for salvage and underwater construction. It had 50 projects under construction when it won the bid for constructing the substructure (piers and abutments) of the 1929 Lake Champlain Bridge.



(From *Black Horse of the Sea*, Robert D. MacMillen, pub. 1929. Courtesy Phil Thurtle)

### THE AMERICAN BRIDGE COMPANY, FORMED BY J. P. MORGAN AND

Company from 24 small companies in 1900, was the major bridge builder in the United States in the early 20th century. By 1929, the versatile company in New York City had erected spans ranging from simple truss bridges over the New York State Barge Canal to the steel-arched Hell Gate Bridge in New York City (1916), the Benjamin Franklin suspension bridge in Philadelphia (1926) and the Carquinez Strait Bridge near San Francisco Bay (1927). It won the bid for constructing the superstructure (steel members and decking) of the 1929 Lake Champlain Bridge. (Public domain, *Bridgeman's Magazine*, 1903, digitized by Google)



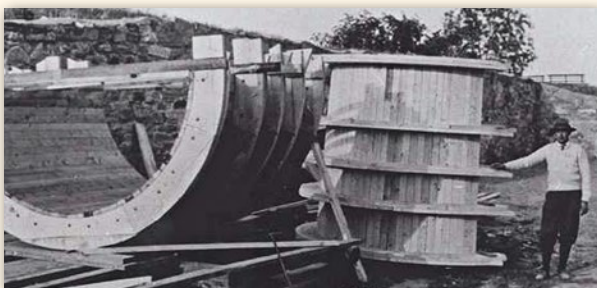


## Bridge Substructure

**M**ERRITT-CHAPMAN AND SCOTT BEGAN WORK on the bridge piers and abutments in June 1928 and completed the work in just six months. Much of the construction materials and machinery was transported by barge up the Hudson River and into Lake Champlain via the New York State Barge Canal. Some construction materials came from local sources, such as the crushed iron ore aggregate mixed into the concrete for the piers that came from Mineville, New York.

The center channel piers were built on bedrock as deep as 100 feet below the lake surface. The concrete mix contained approximately 20,000 tons of iron ore tailings from nearby mines to increase the strength of the concrete. The durable concrete mix and the apparently placid lake setting persuaded bridge designer Charles Spofford that reinforcing steel in the concrete and armor-ing the piers against ice damage were not necessary. These were two contributing factors to the bridge's eventual closing.

Construction of the bridge piers employed the open cofferdam method. Merritt-Chapman and Scott drove sheet metal from the water surface through the lakebed sediments to the bedrock, creating a four-sided watertight enclosure. Lake water was then pumped out of the enclosure and clamshell buckets removed the lake sediment to the bedrock. Tremie (underwater) concrete was then poured into the empty enclosure to about 20 feet from the water's surface. The remaining water was then pumped out and the above-water portions of the piers were constructed using wooden molds.



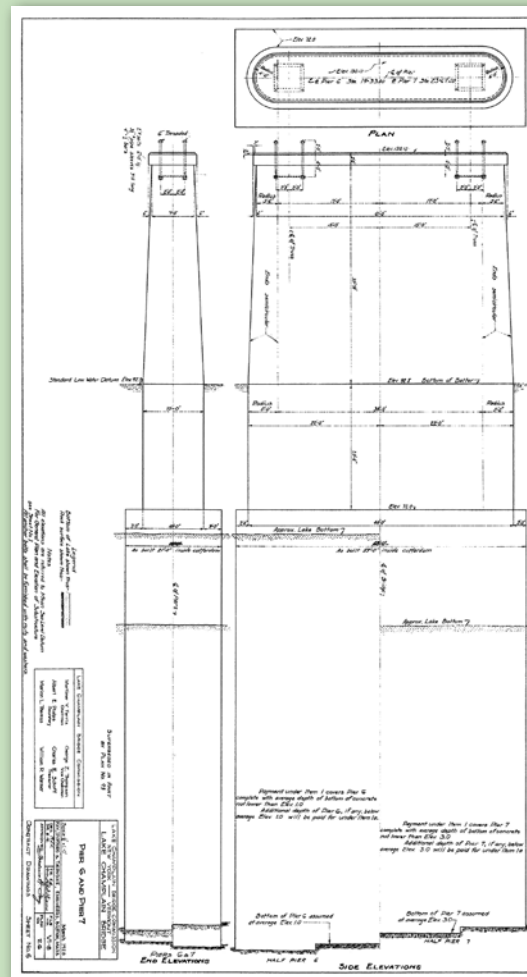
Wooden forms for the curved above-water portion of the bridge piers were constructed on site, next to the ruins of Fort St. Frédéric. (Courtesy Crown Point State Historic Site)

## WHAT IS A COFFERDAM?

**A COFFERDAM IS A TEMPORARY** watertight enclosure built in the water and pumped dry to allow underwater construction. Depending upon the depth of the project, the cofferdam may have to be enclosed and pressurized for divers to safely work within it. In shallower bodies of water, an open cofferdam can be used. It is believed that the Lake Champlain Bridge employed the deepest open cofferdams at the time of its construction in 1929.



Above: Soft lake sediments overlying bedrock, a freshwater lake without rapid changes in water level and little current made it possible to use the open cofferdam method on the deep water piers of the bridge. The shallow cofferdam here on the right is accompanied by a barge on the left with a concrete mixer. (Courtesy Raymond Bodette)



Left: The center channel piers required cofferdams to be constructed to a depth of 100 feet below the water level to reach bedrock. Concrete was poured continuously for six days to fill the deep piers. Test cores were taken from the piers throughout the process and were sent to the Massachusetts Institute of Technology for analysis. Results showed that the concrete was unusually strong, probably the result of the addition of crushed iron ore aggregate, as opposed to typical gravel aggregate, to the mix. (Courtesy Vermont State Archives and Records Administration)



## Bridge Superstructure

**D**URING THE SUMMER AND FALL OF 1928, THE American Bridge Company fabricated the steel members in Elmira, New York. The pieces were transported on the Delaware and Hudson Railway Company tracks to Burdick's Crossing on the New York side and then trucked three miles to the bridge site. With the help of mild winter conditions, the first truss was started by New Year's Day 1929.

Temporary wooden falsework was installed to support the construction of the deck spans, but falsework could not be used under the center span of the bridge, as the channel had to remain open for navigation. Instead, bridge designer Charles Spofford proposed the use of cantilevers to create the center span and arch. These were mounted to the channel piers and extended out until they met, completing the continuous truss.



Once the piers were in place, construction of the steel superstructure began from the New York shore, stretching from pier to pier through the use of falsework and cantilevers, as seen here. (Courtesy Hammond Library, Crown Point, New York)

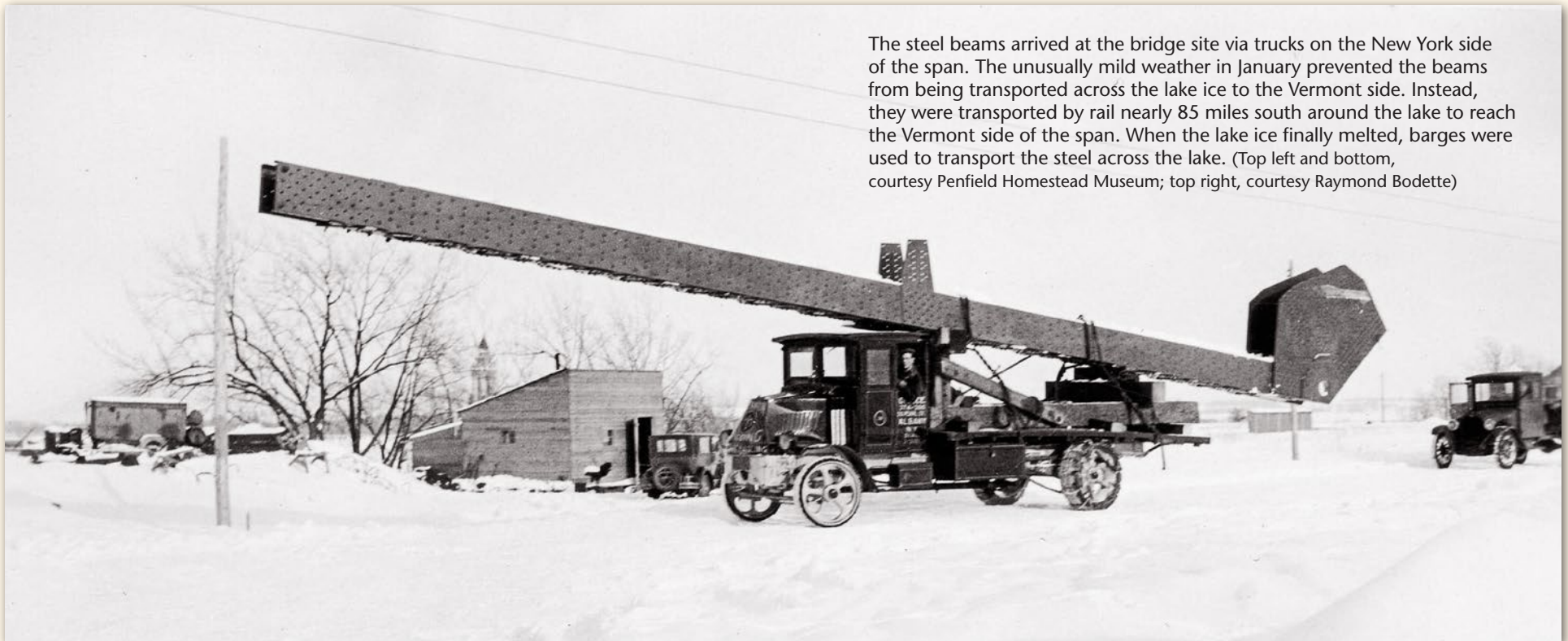
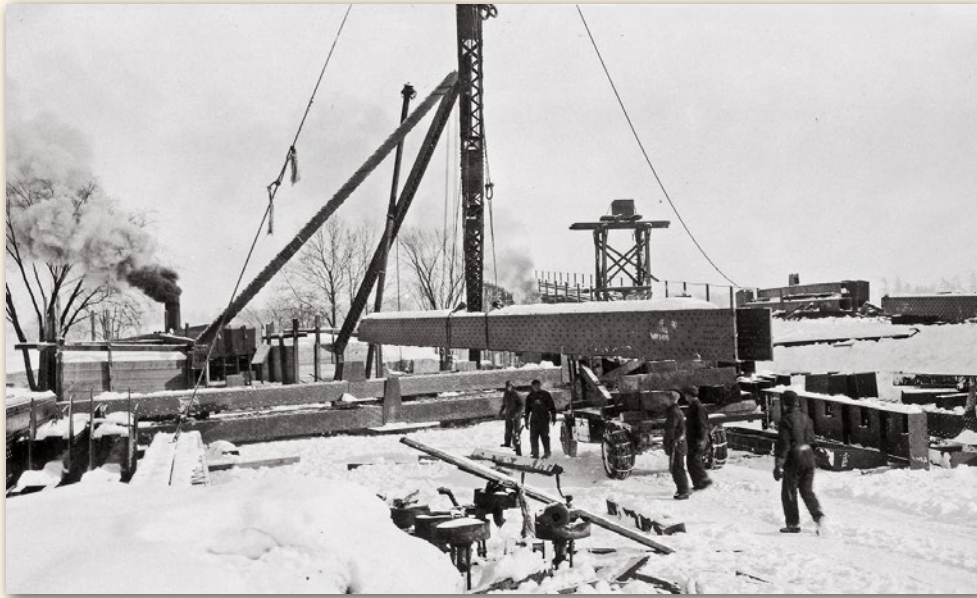
In the 1920s, steel was not available in long pieces as it is today. Many relatively small lengths of steel were transported to the site and riveted together. (Courtesy Vermont State Archives and Records Administration)

*As the final pieces of steel connected at the top, the foreman for the crew called the company engineer and said "The holes don't line up to get the bolt in." And he said, "Well, it's morning. This afternoon with the sun on it, it will expand enough so they will be fine." And they were.*

– Erwin Clark, Addison, Vermont, resident and local historian







The steel beams arrived at the bridge site via trucks on the New York side of the span. The unusually mild weather in January prevented the beams from being transported across the lake ice to the Vermont side. Instead, they were transported by rail nearly 85 miles south around the lake to reach the Vermont side of the span. When the lake ice finally melted, barges were used to transport the steel across the lake. (Top left and bottom, courtesy Penfield Homestead Museum; top right, courtesy Raymond Bodette)

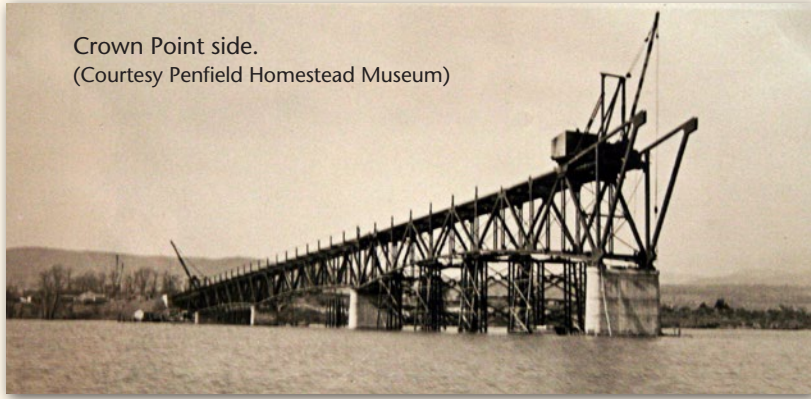




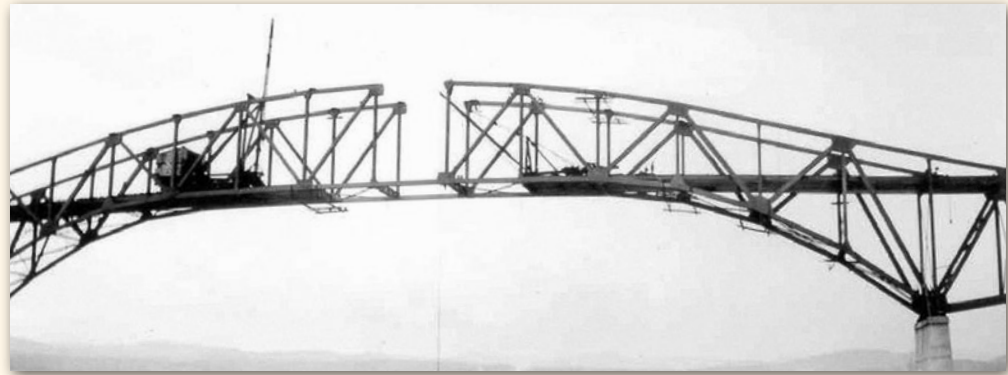
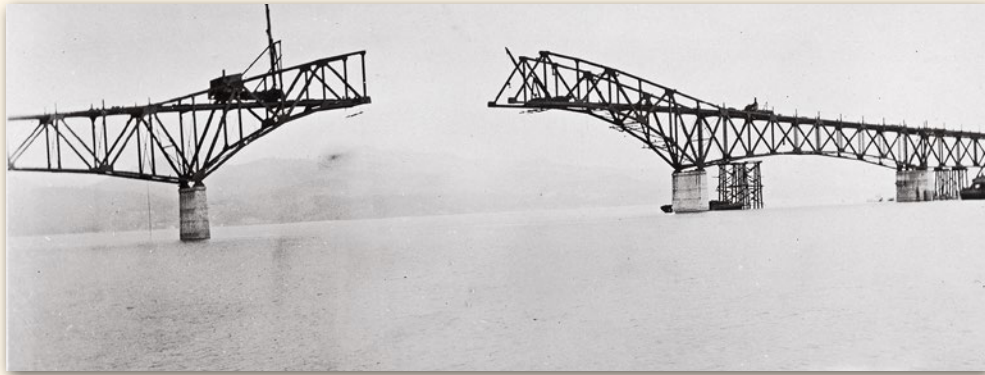
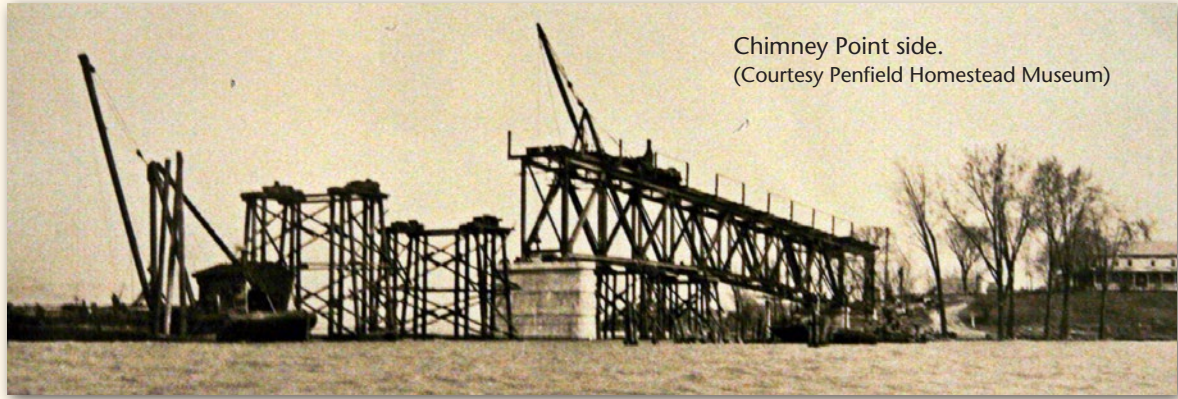
Wooden falsework was used to support all but the center channel span. Pilings for the falsework were sunk down to the lake bedrock, providing support for the construction of the deck spans. When the lake finally did freeze over during that mild winter, the ice was used as a work surface, making construction of the falsework much easier.  
(Left, courtesy Hammond Library, Crown Point, New York; right, courtesy Penfield Homestead Museum)



Crown Point side.  
(Courtesy Penfield Homestead Museum)



Chimney Point side.  
(Courtesy Penfield Homestead Museum)



Because the channel span needed to remain open to navigation, falsework could not be used. Instead, the channel span, which rested on the two deepwater channel piers, was constructed using cantilevers that joined the span to create a continuous truss. (Above left, courtesy Hammond Library, Crown Point, New York; above right, courtesy Crown Point State Historic Site; bottom, courtesy Moriah Historical Society)





## The Finishing Touches

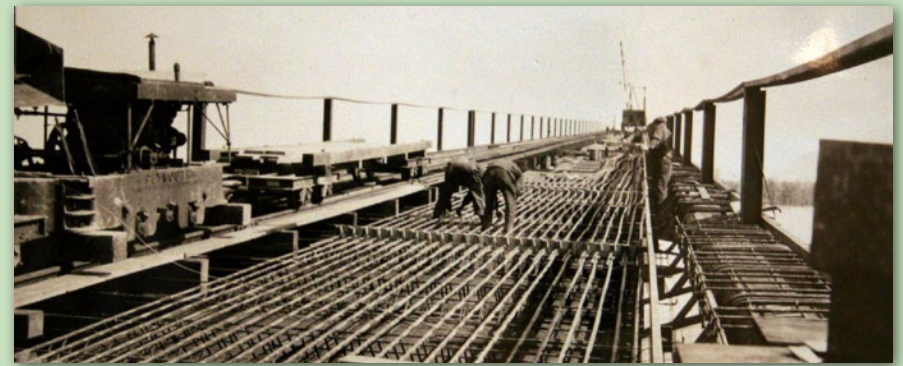
**T**HE AMERICAN BRIDGE COMPANY SUBCONTRACTED THE deck work to Scott Brothers Construction Company of Rome, New York. It built the two-lane deck one lane at a time, with concrete delivered in hopper cars along a rail system on the bridge. A special reinforced concrete surface was used in anticipation of heavy wear on the bridge deck from the common use of tire chains in the winter coupled with a steep grade at either end of the bridge.

Alvin E. Bennett of Crown Point, New York, was contracted to oversee outfitting the electrical systems for the bridge. There were 25 streetlights placed on alternating sides of the bridge and navigational lights were installed for water and air traffic purposes. In the event of an emergency, oil lanterns served as an emergency backup for these critical navigation lights; a battery backup system was later installed.

On July 15, 1929, the Lake Champlain Bridge Commission reported that the highway on the New York side had been paved to the bridge approach and the concrete work for the highway on the Vermont side had commenced. The deck, approaches and connecting roads were completed over the next few weeks, clearing the bridge to open in late August once the concrete had cured.

*It was a much different time of construction, when you used a lot more labor and a lot less equipment.*

– John Grady, Regional Construction Engineer for the New York State Department of Transportation



## CONSTRUCTION TAKES ITS TOLL ON WORKERS

**THE MANY LABORERS WHO WORKED ON THE BRIDGE CAME FROM** surrounding towns and from as far away as Canada. They were housed on site in bunkhouses erected near the entrance to Fort St. Frédéric. The work was fast-paced, laborious and, at times, dangerous. Accidents cost two workers their lives. On June 12, George Vanderhof of Port Henry, New York, was critically injured while loading timber onto a barge. One of the timbers rolled back and struck him, fracturing his spine, left arm and left leg. Vanderhof was taken to the Mineville, New York, hospital and later died. On August 5, Canadian worker Archie Arseneau died after being struck by a swinging beam, falling from a pier 30 feet into the lake.



Top: Workers from Scott Brothers Construction preparing to pour concrete for the bridge deck. (Courtesy Penfield Homestead Museum) Above: Two unnamed bridge workers pause to pose for a portrait. Left: Workers mix concrete. (Courtesy Raymond Bodette)



# Now That We've Got the Bridge



## Let's Have Miles and Miles OF SMILES



JOIN THE AUTOMOBILE PARADE MONDAY, AUGUST 26

After 14 months of construction, the bridge opened on August 26, 1929. The Bridge Commission declared the official slogan to be "Now that we've got the bridge, let's have miles and miles of smiles." (Courtesy Raymond Bodette)



*It is estimated that 4,000 cars were in the Vermont parade forming a line approximately twelve miles long. So long was the line that five hours after the parade had started across the bridge from the Vermont side there was still a procession of cars five miles in length waiting to cross the bridge. Hundreds of people never got near enough to even see the bridge. Without question this vast volume of traffic formed one of the worst jams ever known in the history of Vermont.*

*- The Enterprise and Vermonter, August 30, 1929*

Courtesy Vermont State Archives and Records Administration



## Chapter 4: The Event of the Century

*I remember it just seemed like a lot of excitement. I probably didn't realize what a Governor was but I remember them talking about the Governors meeting on the bridge...and that was the first time I had ever seen a parade. And I remember the band with the bagpipers and the kilts and that really impressed me...and I remember the car that the two Governors rode in, which I think they used to call touring cars with the top down and these two very important men waving at people.*

– June Tur, who was 6 years old when she attended the bridge opening

**O**N AUGUST 26, 1929, MORE THAN 40,000 PEOPLE GATHERED for the opening-day celebrations. Communities from miles around participated in commemorating this new symbol of modernization and local pride. The Lake Champlain Bridge ushered in a new era of unity for the Champlain Valley.

The centerpiece of the celebration, a grand parade, set the scene for friendly rivalry. Both Vermont and New York offered cash rewards for the best float from their states. With high stakes of public glory and monetary reward, communities big and small were thrilled to participate.

The opening-day festivities began with a ribbon-cutting at 2 p.m. Following a 17-gun salute and a bugle call, Governors Franklin D. Roosevelt of New York and John E. Weeks of Vermont shook hands at the center of the bridge and proceeded to the viewing stand on the New York side to watch the procession of festive floats, bands and decorated automobiles.

*By request of the Lake Champlain Bridge Commission and endorsed by the local Chamber of Commerce and the Kiwanis Club, this in order to help make the bridge opening celebration a grand success it is requested that the merchants of Ticonderoga cooperate by closing their respective places of business on the afternoon of Aug. 26th, in order that Ticonderoga make a good showing on that occasion. It is understood that about all of the towns on both sides of the lake in the territory adjacent to the bridge are going to close that afternoon.*

– Ticonderoga Sentinel, August 22, 1929

*There was thousands of people there...I was amazed. I'd never seen that many people.*

– Martin Bezon, who was 7 years old when he attended the opening



Elizabeth Ferris, 17-year-old daughter of Bridge Commission Chairman Mortimer Ferris, cut the ribbon on opening day. (Courtesy M. Virginia LaPointe Southworth)

*Clip went a diminutive pair of scissors in the hands of a pretty maiden and a white ribbon was severed yesterday afternoon at four minutes before two o'clock, Eastern Standard Time, which opened the Champlain bridge to traffic, bringing to fruition the dream of a century and setting in motion long lines of vehicular traffic which promise to go on for centuries to come.*

– Burlington Free Press, August 27, 1929





Official cars led the parade. (Courtesy Vermont State Archives and Records Administration)

The parade commenced with New York participants crossing the bridge to the Vermont side. The combined parade was to return over the bridge in one procession; however, the turnout of parade participants far exceeded expectations. The estimated 4,000 cars and numerous floats extended 10 to 12 miles into Addison County, Vermont.

Two hours after the combined parade had begun, it was halted temporarily to allow the scheduled dedication ceremony to commence. Following an invocation, key project personnel were introduced, including members of the Lake Champlain Bridge Commission and representatives of the engineering and construction companies.

Both governors addressed the crowd. Governor Weeks praised the economic benefits of the bridge, as people on the east and west shores of Lake Champlain could now “with clasped hands, face a future bright with the promise of greater progress and prosperity than has been possible in the past.” Governor Roosevelt emphasized that “one of the greatest strategic points in American history finds itself again on a main artery of travel.”

Travel across the bridge remained free that day until midnight. From then on the Lake Champlain Bridge was open for business and would carry all manner of traffic for the next 80 years.



The official reviewing stand for the parade was on the New York side of the lake. Front row included Governor Roosevelt, directly above ramp; Bridge Commission Chairman Mortimer Ferris, at his left; and Governor Weeks and his wife, above the Stars and Stripes banner. (Courtesy Vermont State Archives and Records Administration)



A lucky few crowded close to the reviewing stand. (Courtesy Vermont State Archives and Records Administration)





Communities from Vermont and New York participated in the parade. Pictured here are the Spirit of Bristol float, above; Middlebury College float, top right; United at Last float, middle right; Ticonderoga float, bottom right; and the Montpelier State Capitol float, below. The Brandon Inn float, a stagecoach mounted on a truck, not pictured, won first place for Vermont. Second prize went to the Montpelier State Capitol float, shown below. New York's first prize went to Fort Ticonderoga for its depiction of Champlain's battle with the Iroquois, not pictured. Witherbee, Sherman, and Company won New York's second prize for its mining industry float, not pictured. (All float photos courtesy Vermont State Archives and Records Administration)







People streamed over the bridge, obstructing the parade and causing a traffic jam many miles long. (Courtesy Vermont State Archives and Records Administration)



Spectators and participants came from miles around to witness this monumental event. (Courtesy M. Virginia LaPointe Southworth)

A flotilla from yacht clubs on Lake Champlain came to the opening and paraded under the bridge as part of the festivities. (Right, photo by McAllister, courtesy Rick Norcross; below, courtesy Moriah Historical Society)







People watched the celebration from the Crown Point Campground, the Champlain Memorial Monument, Chimney Point and from boats on Bulwagga Bay.  
(Courtesy Vermont State Archives and Records Administration)



Fireworks were set off from the water float *Henry Proctor* and an aviation show wowed onlookers as one plane unexpectedly flew under the main span of the bridge.  
(Courtesy Vermont State Archives and Records Administration)

A bronze plaque was placed at the center of the bridge to commemorate the cooperation it took to bring the Lake Champlain Bridge to the Champlain Valley.  
(Courtesy New York State Department of Transportation)







Postcard of the original traffic circle, toll house and tollbooth. (Courtesy Suzanne Maye)



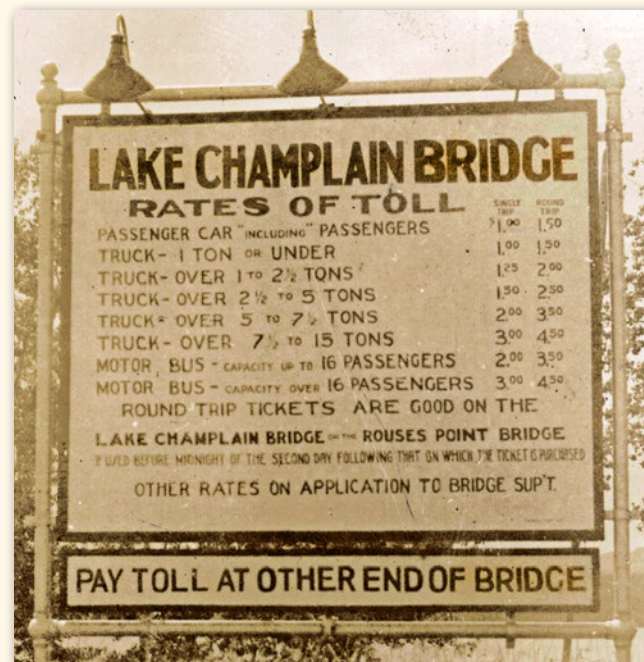
William G. LaFrance Jr. served as the head toll collector from 1975–1987. This photograph was taken in 1984. (Courtesy William G. LaFrance Jr.)

*We just did all kinds of things, jack of all trades we were. We enjoyed working with the public. Made a lot of friends.*

– William G. LaFrance Jr., toll collector from 1975–1987



Walter T. Wojewodzc, right, collected tolls from 1980–1985. This photograph of Wojewodzc and head toll collector William G. LaFrance Jr., left, dates from 1982. (Courtesy William G. LaFrance Jr.)



This sign was on the Vermont end of the bridge. The Bridge Commission instituted round-trip rates after the Rouses Point Bridge opened at the northern end of the lake in 1937. Travelers could use their round-trip tickets to cross the lake at either bridge within a 48-hour period. (Courtesy Vermont State Archives and Records Administration)



# Chapter 5: Taking the Toll

*Anything that hit that treadle had to be accounted for.*

– Frank Wojewodzic, toll collector

**A**FTER THE OPENING-DAY CELEBRATION, TOLL collection began. The Bridge Commission established tolls to repay the construction bonds and to fund bridge operation and maintenance. Initial tolls were \$1 for an automobile, \$1–\$2 for a truck or tractor, \$2–\$3 for a motor bus, 50 cents for a horse-drawn carriage or motorcycle and 25 cents for a pedestrian. On the first day of toll operations, 2,300 automobiles crossed the bridge. Within a week, more than \$7,000 was raised in toll revenues.

*When they started the bridge it was very expensive. I'm not sure that people used it any more than they had to. In fact, sometimes when we had guests from New York, my father would row the boat over to Crown Point to save a dollar.*

– Raymond Bodette, Vergennes resident and local historian

## TOLLS THROUGH THE YEARS

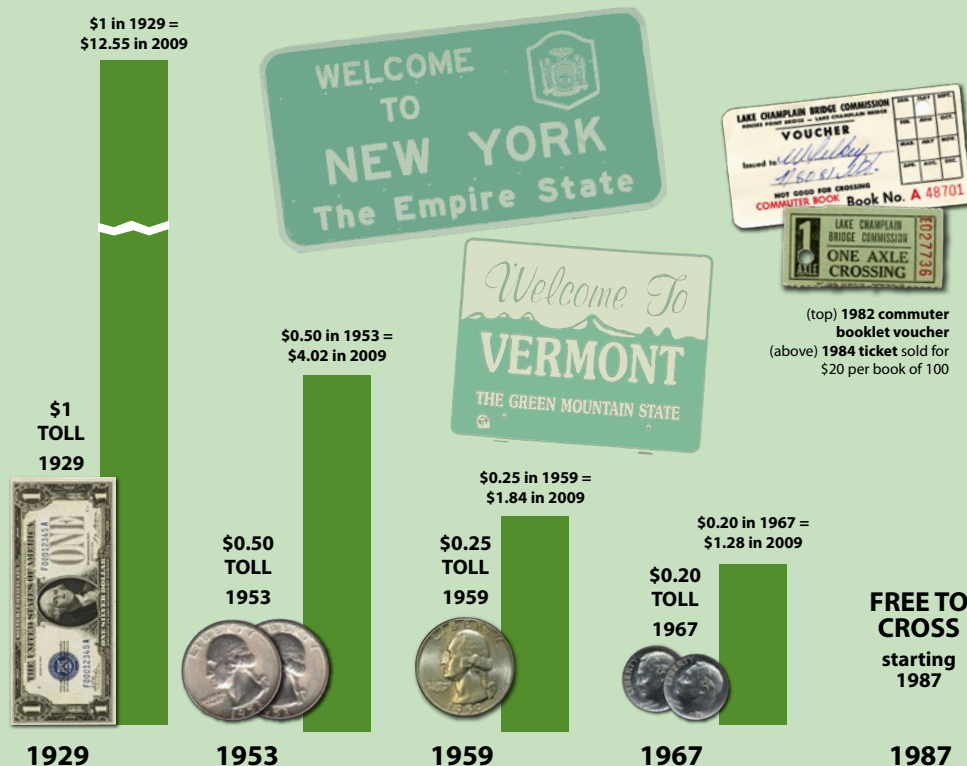
**OVER THE YEARS, THE LAKE CHAMPLAIN BRIDGE COMMISSION** adjusted toll rates several times. The initial \$1 fee for automobiles in 1929 was the equivalent of nearly \$12.55 in 2009, the year the bridge closed. For many people, that cost was beyond their reach.

In the decades that followed, tolls declined at a steady rate. In 1953, the Bridge Commission decreased the toll for automobiles to 50 cents to encourage use by vacationers and local traffic. When the construction bonds for the bridge and debt payment to New York and Vermont were paid off in 1956, the Bridge Commission continued collecting tolls to build up maintenance and repair funds.

Tolls were decreased again to 25 cents for automobiles in 1959 and reduced once again in 1967 to 20 cents per passenger car. Special commuter rates were created, with commuter booklets available for passenger cars and multiple-axle trucks. The purchase of a \$4 commuter booklet in 1967 allowed an automobile to cross 100 times for as little as 4 cents per crossing.

In 1972, the Bridge Commission decided to raise tolls for commercial vehicles with multiple axles to help offset rising repair costs resulting from heavy truck traffic on the bridge. It was becoming apparent the tolls were not covering the cost of operation and maintenance.

In 1987, when the states of New York and Vermont took over joint ownership of the Lake Champlain Bridge, the tolls were removed, allowing access to federal funding for needed repairs.



When the bridge opened, the toll costs were considerable. Over the following decades, the price decreased and commuter rates were established.





## The Toll Plaza

**T**HE BRIDGE HAD JUST ONE TOLL PLAZA, LOCATED ON the New York side, to collect tolls from vehicles traveling both east and west. The toll plaza originally included a traffic circle, a tollbooth and two gated lanes. Traffic counters were placed in the roadway at each of the gates. Vehicles traveling from New York to Vermont simply approached the booth and paid the toll for the gate to be opened. Vehicles coming from Vermont to New York crossed the bridge before encountering a gate on the west side. When ready, the toll collector manually opened that gate, allowing passage to the tollbooth to pay the fare. This system gave the lone toll collector control over the amount of traffic approaching the booth at one time.

With the increase in tractor-trailer traffic across the bridge in the late 1960s, rubber treadles were embedded in the road to record the number of axles passing over. That information was transferred to the tollbooth registers. In 1987, when the bridge became toll-free, the tollbooth and toll-collecting equipment were removed.



The original tollbooth, left, was replaced in 1969 with a prefabricated metal tollbooth, above. (Left, courtesy the family of John Pepper; right, courtesy Moriah Historical Society)

## A Day's Work

**T**HE FIRST PAID STAFF COMPRISED A BRIDGE SUPERINTENDENT and two full-time toll collectors. The superintendent worked a six-hour shift and the toll collectors each worked nine-hour shifts, allowing 24-hour coverage of the tollbooth. By the mid-1940s, the bridge crew consisted of six employees, expanding in the late 1970s to seven full-time and five part-time employees collecting tolls and maintaining the bridge. The Bridge Commission often recruited retired military and state police as toll collectors.

Beyond the daily routine of collecting tolls and recording the revenue from their shifts, toll collectors could be found giving directions to travelers and fielding complaints about the tolls. In the winter, they removed snow from around the tollbooth and, during emergencies, they directed traffic.





Warren "Bob" Lee, center, an electrician from Ironville, New York, was hired in 1930. When he retired 51 years later in 1981, he was the Bridge Commission's longest-serving employee. Lee's colleagues claimed that he knew the electrical system "like no one else." Oliver "Ollie" Currier, left, was a foreman of the bridge painting crew. Dan Lee, right, Bob's son, was a part-time electrician's helper in the 1950s and early 1960s. (Courtesy Dan Lee)



Toll collectors David Vosburg, left, and Frank Wojewodzc, right, in 1984. (Courtesy William G. LaFrance Jr)

## TOLL TALES

### THE DAILY ROUTINE OF THE TOLL COLLECTORS WAS INTERRUPTED

occasionally by incidents on the bridge ranging from the dangerous to the absurd. In July 1933, the toll collector on duty witnessed the arrest of a bootlegger's convoy transporting \$20,000 worth of liquor from Burlington, Vermont, to New York State.

In May 1944, three teenagers robbed toll collector John Pepper of \$150 during his Sunday night shift and escaped in his car. Local newspapers considered the incident one of the most flagrant cases of juvenile crime on record in the area. In December 1945, a car accidentally destroyed the tollbooth, landing toll collector Richard Watson in the road. Watson was not seriously injured, but the damage to the tollbooth and toll counter was estimated at \$2,500 to \$3,000. Robert Hicks, in the 1970s, described seeing two "streakers" cross the bridge. Frank Wojewodzc recounted a case where a woman passenger asked him to arrest the driver for kidnapping.

Toll collector John Pepper was known as an affable fellow with a reputation for storytelling. When asked what he would do if a traveler didn't pay, he would often say: "All I got to do is push a button and the bridge opens right up in the middle and you'll drop right in." In response to a traveler's question, "How far did Samuel de Champlain sail down the lake?" Pepper reportedly quipped that Champlain had broken his mast trying to sail under the bridge and that the mast was still stored there.

Below: Jerry Downs, left, bridge superintendent from 1981–1987, and Robert Hicks, toll collector from the 1950s through the early 1980s, hold up a pair of extra-large toll collector trousers. (Courtesy William G. LaFrance Jr.)



Above: John Pepper, pictured left, a toll collector from the early 1940s until 1962, with fellow worker Ray Winters. (Courtesy the family of John Pepper)



## BRIDGE RULES 1929

### THE BRIDGE RULES AND REGULATIONS PROHIBITED:

- Jumping or diving from the bridge
- Climbing on the bridge
- Fishing from the bridge or mooring boats near the abutments or piers
- Sledding on the bridge
- Entering the tollbooth or toll collector's house
- Defacing the bridge
- Bringing explosives on the bridge
- Placing substances on roadway that could injure tires

Vehicles could not be operated at a speed exceeding 30 miles per hour, a speed associated with reckless driving. When approaching the tollbooth, a driver had to adjust speed to allow the vehicle to come to a complete stop within 10 feet of the tollbooth.

Stopping or parking on the bridge was forbidden, although repairing one's vehicle in an emergency was permitted as was stopping to allow a person riding, leading or driving a horse or driving cattle or other animals from the opposite direction to pass. Passing was permissible if "there be no interference with traffic in the opposite direction."

Toll collectors had to grant prior permission for crossing to operators of vehicles with unusual sizes and shapes or owners of animals for which no toll rate had been established. Vehicles with spikes, cleats or worn tires needed the express permission of the toll collector to cross, as did vehicles heavier than 40,000 pounds or wider than eight feet.

## Running a Tight Ship

### THE BRIDGE SUPERINTENDENT

**T**he bridge superintendent oversaw all behind-the-scenes work at the bridge. It was an around-the-clock job with no commuting costs, for it had the added benefit of residence in the Toll Collector's House. The superintendent scheduled toll collectors, supervised maintenance workers, compiled daily records and paperwork to be sent to the Secretary/Treasurer of the Bridge Commission and, on occasion, staffed the tollbooth.

The superintendent also was responsible for filling out accident reports and notifying the Vermont and New York State Police of any incidents or illegal behavior, such as drunk driving or failure to pay the toll. As the bridge keeper, he also was required to be knowledgeable about construction repairs and all bridge procedures. Any damages to the bridge had to be reported immediately to the bridge engineers Fay, Spofford & Thorndike in Boston and an inspection visit had to be scheduled.



Bridge Superintendent Robert A. Clarke and his wife Betty lived in the Toll Collector's House from 1974–1981. (Courtesy the family of Robert A. Clarke)

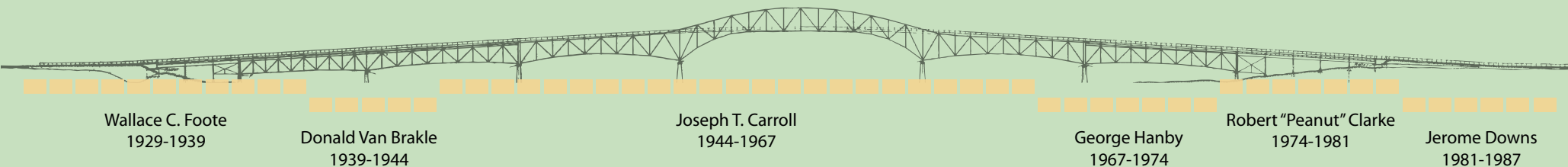
*If things got on the rough side when you were in a booth, if somebody comes by and gives you any trouble, all you had to do was buzz the buzzer in the house. That's where the boss lived, and he'd come out and he'd take care of the matter, and that would be the end of it.*

– Frank Wojewodzic, toll collector



The Toll Collector's House was designed in 1929 by architect D. Jackson and built by Charles Malone of Crown Point, New York. (Courtesy New York State Department of Environmental Conservation)





## BRIDGE SUPERINTENDENTS THROUGH THE YEARS

### The Toll Collector's House

**B**UILT IN 1929, THE TOLL COLLECTOR'S HOUSE ON THE New York side of the bridge has served various functions over the years. From 1929 to 1981, bridge superintendents lived there, making it their home during their tenure. The last superintendent, Jerome Downs (1981–1987), elected to live in Peru, New York, because he oversaw the Lake Champlain Bridge and the Rouses Point Bridge to the north.

The Toll Collector's House included a dining room, kitchen and bath in the rear of the house. The building also provided office space for the Bridge Commission and toll collectors. The upper story contained a hall, two bedrooms and attic storage areas, while the basement contained a fire-proof vault, two-car garage and coal-fired furnace. In 1945, the house was enlarged with a two-story addition, including a sunroom and additional storage below.

Since 1992, the Regional Office of Sustainable Tourism (Lake Placid/Essex County Visitors Bureau) has operated the building as the Lake Champlain Visitors Center. It currently houses an exhibit on the historic 1929 Lake Champlain Bridge and is open to the public.

The Toll Collector's House, along with the Lake Champlain Bridge, was placed on the National Register of Historic Places in 2009 and now serves as the Lake Champlain Visitors Center. (Courtesy Lake Champlain Maritime Museum)

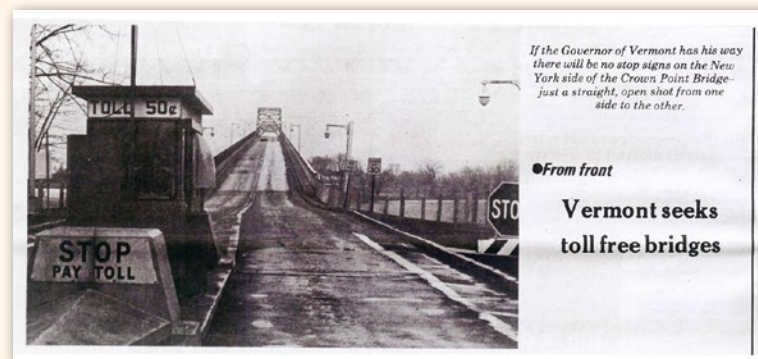


Tolls were an ongoing topic of debate until they were phased out in 1987.  
(Courtesy Moriah Historical Society)

### The End of the Toll Era

**I**N THE 1980S, IT BECAME CLEAR THAT THE 1937 ROUSES Point Bridge, connecting Rouses Point, New York, to Alburgh, Vermont, had to be replaced. The Bridge Commission, which oversaw both bridges, did not have adequate funding for the project. The states of Vermont and New York took over ownership of both the Lake Champlain and Rouses Point bridges. After seeking assistance from the federal government, the states were granted the funding for the Rouses Point Bridge replacement. Federal funding meant that tolls could no longer be collected. In 1987, both the Lake Champlain Bridge and the newly constructed Rouses Point Bridge became toll-free.

The Lake Champlain Bridge Commission, which had controlled bridge operations for more than 60 years, was disbanded. Bridge staff was absorbed by the New York State Department of Transportation and the Vermont Agency of Transportation. The New York State Department of Transportation took over the maintenance and responsibility of the Lake Champlain Bridge while Vermont did the same for the Rouses Point Bridge. With tolls removed, traffic flowed even more freely across Lake Champlain, promoting greater connection between New York and Vermont in this region.



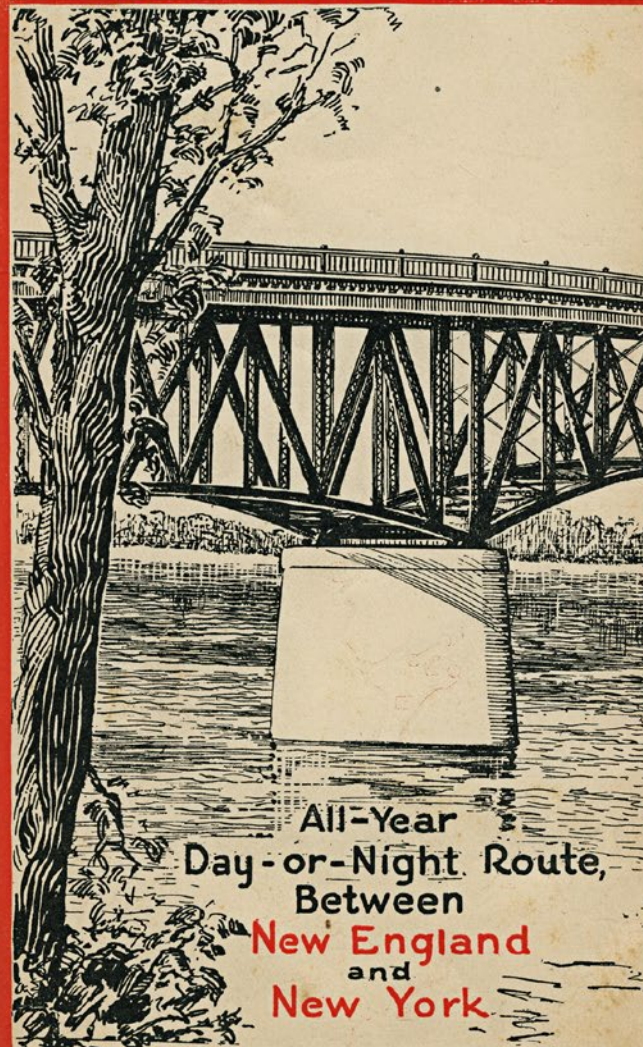


*You didn't simply just pass over it. You had to experience it both while you were crossing it and to be up there high looking out across the lake and the mountains in either direction, but you also had to get to it... you had to sort of wind your way to it and you would glimpse it here and you would glimpse it there...It was just part of your experience of crossing the lake that was really special.*

– Steven Engelhart, Executive Director,  
Adirondack Architectural Heritage

As soon as the Lake Champlain Bridge opened in 1929, the Bridge Commission got to work promoting its use with maps and brochures. (Courtesy Chimney Point State Historic Site)

# Routes to LAKE CHAMPLAIN BRIDGE



All-Year  
Day-or-Night Route,  
Between  
**New England**  
and  
**New York**

LAKE CHAMPLAIN BRIDGE COMMISSION  
ESTABLISHED BY COMPACT BETWEEN THE  
STATES OF NEW YORK AND VERMONT

# Routes to LAKE CHAMPLAIN BRIDGE

The New Gateway between  
ADIRONDACKS  
and  
GREEN MOUNTAINS



NO DELAYS  
– the only highway across  
Lake Champlain -- joining

**NEW YORK**  
and  
**VERMONT**

LAKE CHAMPLAIN BRIDGE COMMISSION  
ESTABLISHED BY COMPACT BETWEEN THE  
STATES OF NEW YORK AND VERMONT



## Chapter 6: 80 Years of Use and Unity, 1929–2009

*Where you going? Over by the bridge for a picnic... go fish over by the bridge. Everything was referred to by the bridge or near the bridge or over the bridge.*

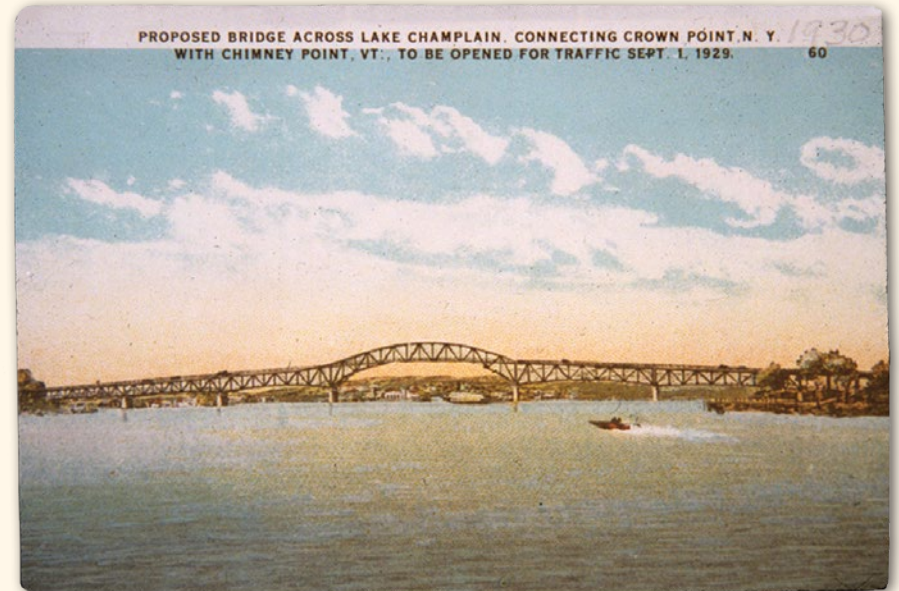
– Martin Bezon, local resident who attended the 1929 opening-day celebrations

**T**HE LAKE CHAMPLAIN BRIDGE WAS A CENTRAL FEATURE in an area steeped in history and natural beauty. The Crown Point–Chimney Point area offers forts to explore and campgrounds, boat launches, fishing spots and scenery to enjoy. The bridge allowed travelers easy access to skiing or hiking in the mountains. Many types of vehicles crossed it, from horses and carts in the 1920s and 1930s to bicycles, motorcycles, large trucks and wide farm equipment in later decades. Whether you were a local or a visitor, the bridge played a memorable role in your experience of the area.

*It's hard not to have an image of the bridge in your mind having crossed it just once.* – Theodore “Ted” Zoli, III, engineer and designer of the new Lake Champlain Bridge



The nearby campground at Crown Point was, and still is, a popular spot for camping and picnicking. (Courtesy New York State Department of Environmental Conservation)



Through the years the Lake Champlain Bridge was the subject of dozens of local postcards. (Top, courtesy Special Collections, University of Vermont Libraries, bottom, courtesy Moriah Historical Society)

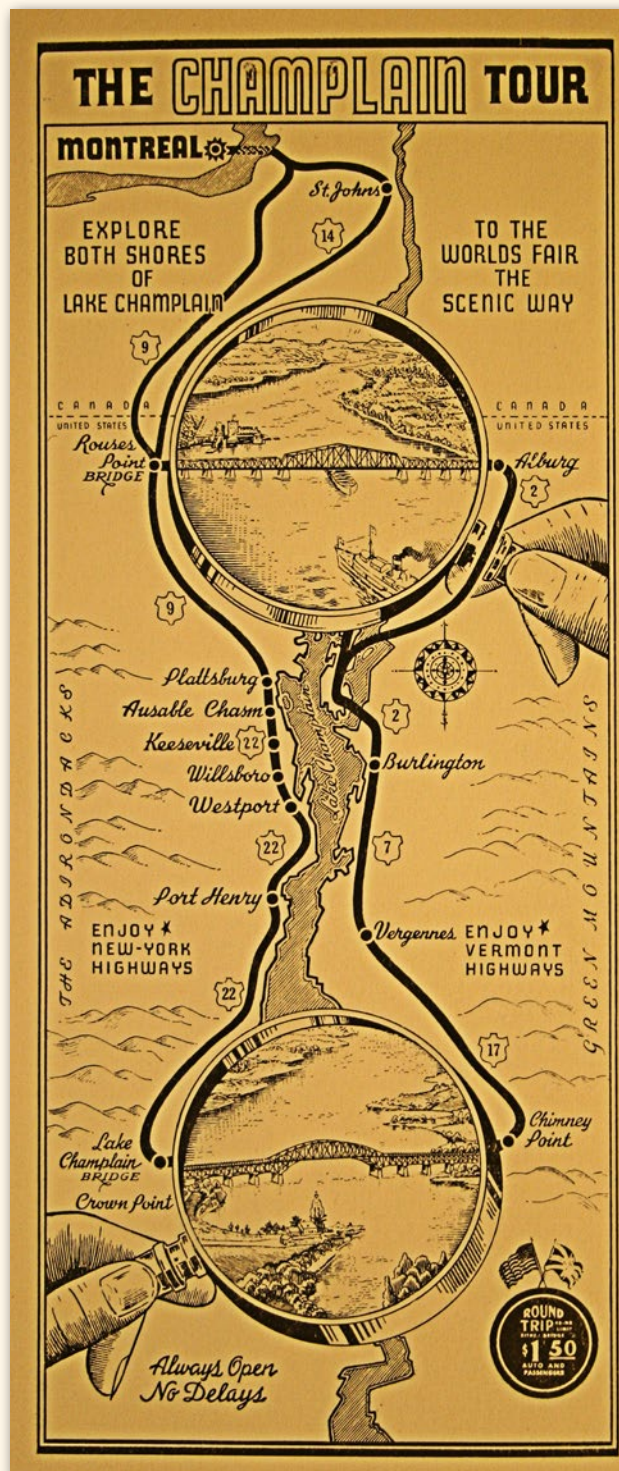


## A Driving Force

**I**N THE EARLY 20TH CENTURY, TOURing by automobile became a new national phenomenon. Automobiles gave individuals and families the ability to travel greater distances and to see new sites. For many, the Champlain Valley offered an affordable escape from the city where they could camp, fish and relax without great expense. The ferry companies on Lake Champlain were the first to tap this market, promoting auto-tourism in the area through regional automobile clubs.

When the Lake Champlain Bridge opened, it became the central link in an improved transportation network encouraging people to vacation in the valley, crossing through the region en route to the Adirondacks, the Green Mountains and Montreal. The many tourists who used the bridge supported the local economy by staying at hotels, motels and camps and purchasing goods and services in the surrounding communities. Ticonderoga, Port Henry, Crown Point and Vergennes advertised accommodations for travelers. Stores and restaurants welcomed the business brought by summer tourists. Two years after the bridge opened, the Lake Champlain Bridge Commission could boast that automobiles from “every state in the union and from eight provinces of Canada” had crossed the bridge.

The Champlain Tour endorsed travel on both sides of Lake Champlain. Tourists could cover more than 200 miles, with various side trips and attractions highlighted. This 1967 brochure promoted a scenic travel route to the World’s Fair held in Montreal that year. (Courtesy Special Collections, University of Vermont Libraries)



## CHAMPLAIN TOUR

*You'll enjoy every minute...and you'll make the most of every minute, when you cross Lake Champlain by Bridge.*

– Lake Champlain Bridge Commission brochure for the Champlain Tour

## THE LAKE CHAMPLAIN BRIDGE

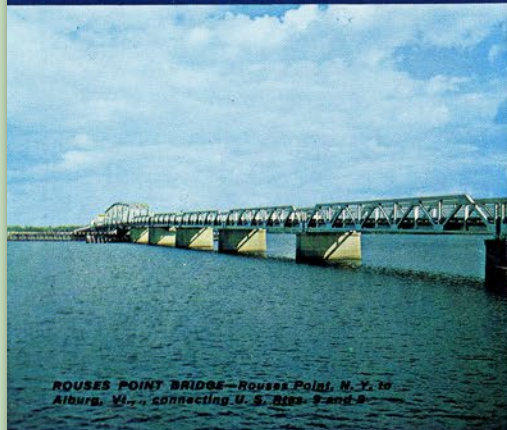
Commission began promoting the Lake Champlain Bridge with maps and brochures that highlighted the historic and scenic attractions on either side of the lake that would bring tourists to the area. The Bridge Commission tracked the number, type and origin of vehicles crossing the bridge to identify trends in bridge use.

When the Rouses Point Bridge, connecting Rouses Point, New York, with Alburgh, Vermont, at the northern end of the lake was completed in 1937, the Lake Champlain Bridge Commission instituted a \$1.50 round-trip toll for travel within 48 hours over either of the bridges. So was born the “Circle Tour,” or the “Champlain Tour,” which looped the Champlain Valley with crossings at both the Lake Champlain and Rouses Point bridges. Tourist maps and brochures highlighted historic and recreational stops along the way. Automobile clubs took advantage of this new way to see the Champlain Valley.



# Lake Champlain Bridges

# Lake Champlain Bridges

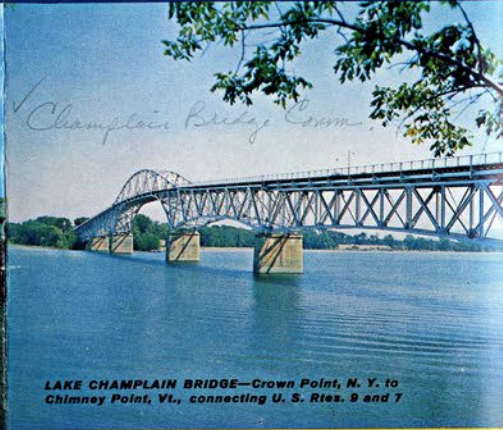


ROUSES POINT BRIDGE—Rouses Point, N. Y. to Alburg, Vt., connecting U. S. Rtes. 9 and 2

**ALL YEAR — DAY OR NIGHT — NO DELAYS**

**OFFICIAL GUIDE**  
**HISTORIC & SCENIC**  
**Lake Champlain Islands**  
**Adirondack — Green Mts.**

STATES OF NEW YORK AND VERMONT  
**LAKE CHAMPLAIN BRIDGE COMMISSION**  
CROWN POINT, N. Y.

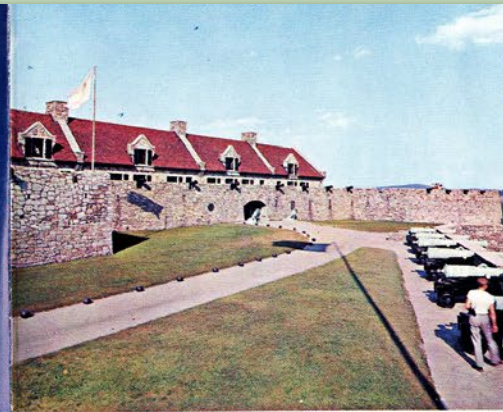


LAKE CHAMPLAIN BRIDGE—Crown Point, N. Y. to Chimney Point, Vt., connecting U. S. Rtes. 9 and 7

**ALL YEAR — DAY OR NIGHT — NO DELAYS**

**OFFICIAL GUIDE**  
**HISTORIC & SCENIC**  
**Lake Champlain Islands**  
**Adirondack — Green Mts.**

STATES OF NEW YORK AND VERMONT  
**LAKE CHAMPLAIN BRIDGE COMMISSION**  
CROWN POINT, N. Y.



FORT TICONDEROGA, NEW YORK



SHELBURNE MUSEUM, SHELBURNE, VERMONT

**ON THE POPULAR MOTOR ROUTES BETWEEN MONTREAL AND NEW YORK  
ADIRONDACK AND GREEN MOUNTAINS—**

## Two Lake Champlain Bridges

Historic Lake Champlain, 116 miles long, is spanned by two modern interstate bridges which connect the principal Adirondack motor routes with those of Northern New England. By using

### NEW LOW TOLL RATES

Toll rates for all  
vehicles include  
driver and  
passengers

these bridges, motorists travelling through the Champlain Valley can vary their trips, visit many places of historic and scenic interest, yet do it easily and economically, travelling on first-class U.S. and state highways on either side of the lake. The bridges are open 24 hours a day, 12 months a year, so users travel continuously, without ferry delays.

### LAKE CHAMPLAIN BRIDGE ROUSES POINT BRIDGE

CROWN POINT, N.Y. to CHIMNEY POINT, VT.  
CONNECTING U.S. ROUTES 9 AND 7

ROUSES POINT, N.Y. to ALBURG, VT.  
CONNECTING U.S. ROUTES 9 AND 2

Champlain Tour brochures highlighted history, arts and recreational attractions throughout the Champlain Valley, providing all types of travelers with something that appealed to them.

(Courtesy Special Collections, University of Vermont Libraries)



## A Sign of the Times

**D**ETAILED RECORDS OF BRIDGE USE OVER THE YEARS kept by the Lake Champlain Bridge Commission reflected the ups and downs of the 20th-century American economy. During the Great Depression, vacation spots across the country all saw a dramatic decrease in visitors. The Lake Champlain region was no exception. An excerpt from the Bridge Commission's annual report for 1933 noted that "Income from tolls for the year 1933 showed a decrease of 18.37% from the year 1932...We are convinced that the falling-off of tolls is caused solely by the depressed times, causing people generally to omit or greatly curtail their vacation trips."

In 1941, the United States entered World War II. National defense measures brought the economy out of the Depression and into an era of wartime prosperity. That year's Commission reported, "Net income from both the Crown Point and the Rouses Point bridges is the greatest in their histories, attributed indirectly to increased prosperity resulting from National Defense measures."

But the Bridge Commission also accurately predicted this prosperity would not last. With wartime gasoline and tire rationing in effect, the bridge experienced its worst year on record in 1943. The Commission reported that travel was reduced to strictly essentials between the two states.

With the end of World War II and its restrictions came renewed prosperity. The Champlain Valley again became a year-round tourist destination in the 1950s; brochures continued to boast about the foliage, skiing, boating, swimming and hiking in the region. However, the unsteady national economy in the late 1960s to the mid-1970s, coupled with high transportation costs sparked by the oil embargo of 1973, resulted in static use of the bridge. Instead of focusing on tourism, the Bridge Commission began to consider the promotion of larger vehicles and commuter use of the bridge a priority during decades to come.

Local residents began to take advantage of these commuter incentives and the lower toll costs made daily crossings possible. Commuter booklets allowed passenger cars to cross for as little as 4 cents in 1967, making new economic and social opportunities possible for people living near the bridge. Commuter use of the bridge would steadily increase over the next three decades; the Lake Champlain Bridge would become much more than a transportation link to many living and working nearby.

*I used to use the bridge for work and for personal use every day, to get back and forth from work and to come across and visit friends and family. It was something I depended on every day.*

— Bruce Peters, Crown Point, New York



Many commuters came to rely on the Lake Champlain Bridge to get to work.  
(Courtesy New York State Department of Transportation)

## Community Connections

**T**HE LAKE CHAMPLAIN BRIDGE CONNECTED COMMUNITIES. Locals thought of it as "our bridge" and its presence, service and beauty played a significant role in the lives of many who lived near it.

When the bridge first opened, however, many local residents did not use it due to high toll costs and because life as they knew it did not necessarily involve crossing the lake on a regular basis. This changed as the bridge became a gateway to new opportunities.

In the 1930s, regional football teams took advantage of the new bridge with cross-lake rivalries. Games between Mineville, New York, and Middlebury, Vermont, or Moriah, New York, and Middlebury led to increased bridge use on those particular Sunday afternoons. These events brought communities together.

Nearby tourist accommodations, attractions, country stores and restaurants all came to depend on bridge traffic for their livelihood. Some farmers managed fields on both sides of the lake, transporting produce, tending to



*People would import meat from Vermont...a lot of the milk was brought across too....There were always the logs that were going one way or another. Some were going down to the paper company and some were coming this way to local saw mills.*

– Erwin Clark, Addison, Vermont, resident and local historian



Over its life, the bridge formed the backdrop for many events. In 1959, during the 350th anniversary of Samuel de Champlain's voyage on Lake Champlain, it was seen behind a reenactment of that event.

(Courtesy Vermont State Archives and Records Administration)

crops and animals and attending cattle sales or Dairymen's League meetings. The eight or nine trucks crossing the bridge daily in the mid-1930s included tractors pulling combines or hay wagons, requiring oncoming traffic to wait. This remained a frequent event on the bridge throughout its existence.

Other local industries soon followed in the 1950s into the 1970s. New Yorkers could now press their apples at the cider mill in Shoreham, Vermont, and Vermonters could get their sand and gravel at Carrara's in Crown Point. Logging trucks carried pulp wood from Vermont to the paper mill in Ticonderoga, New York. Local residents had the freedom to work at businesses on the opposite side of the lake, such as Simmonds Precision, Standard Register and B.F. Goodrich. Residents in both states traveled the bridge to visit doctors and hospitals; it connected families, friends and colleagues.



The Lake Champlain Bridge was the backdrop for countless events and excursions. People boated beneath it and fished and swam in its shadow. (Courtesy James Boni)

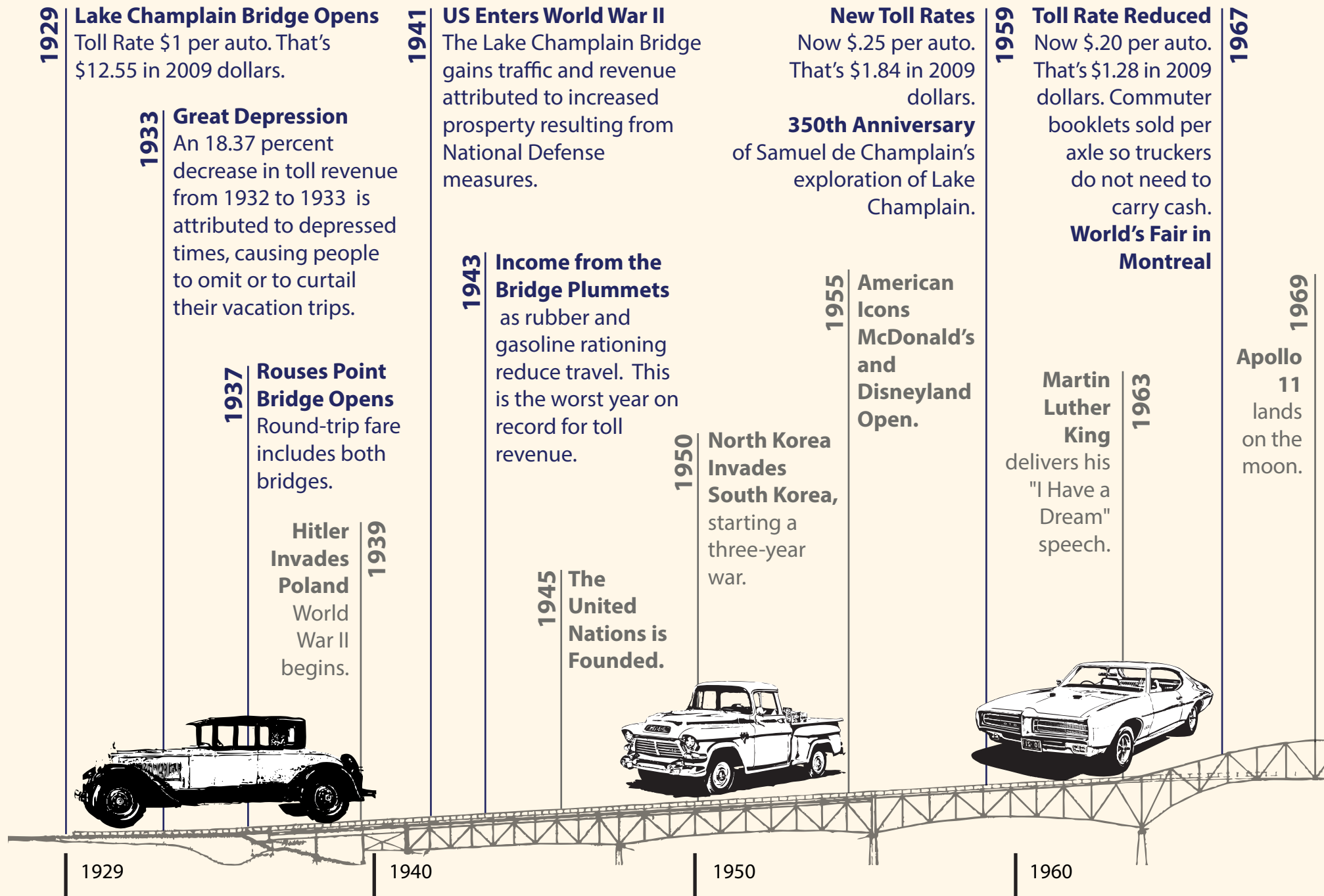


Farm equipment traveled the bridge almost daily as farmers tended their cattle and fields on opposite sides of the lake.

(Courtesy New York State Department of Transportation)

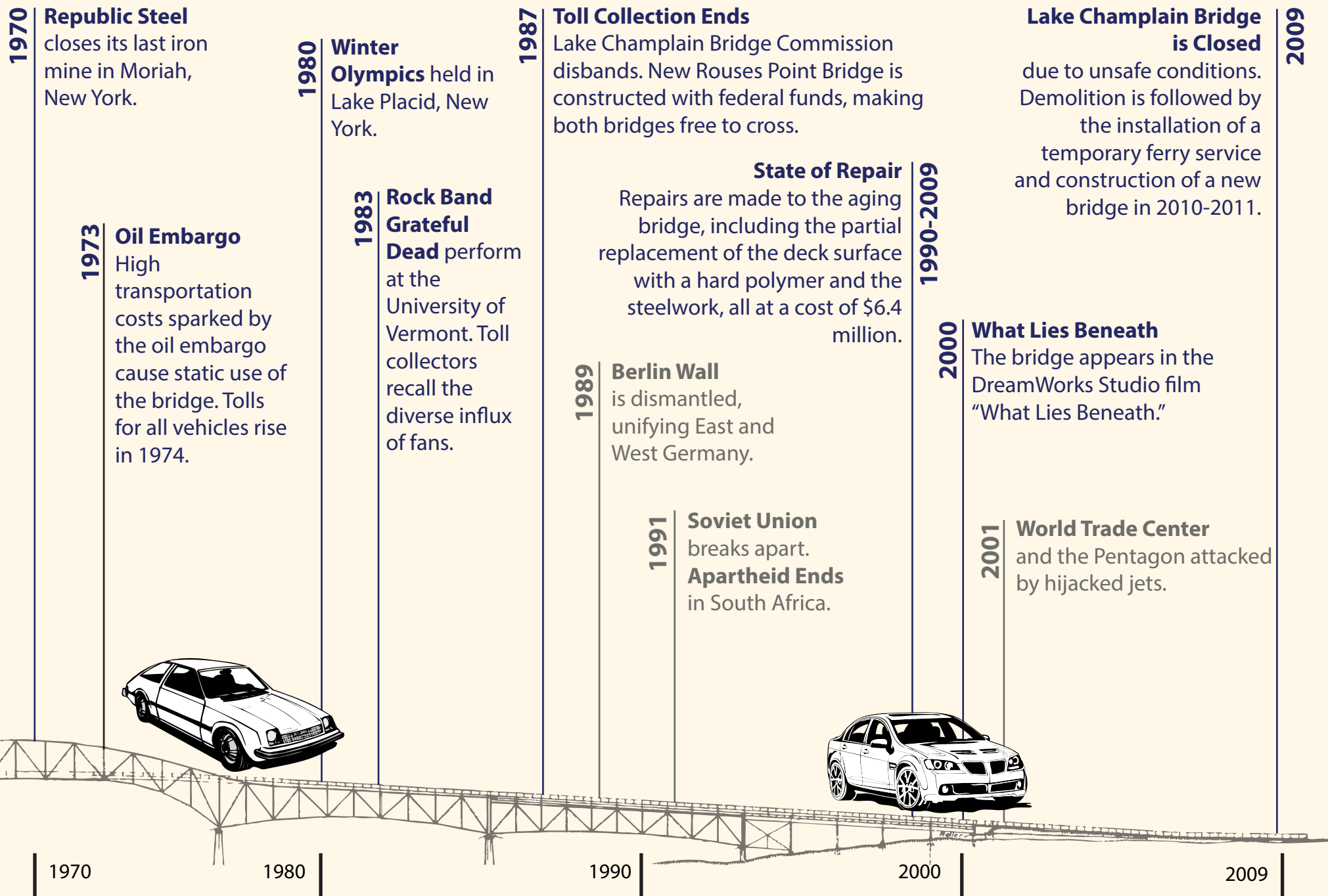
For most of its 80-year life, the Lake Champlain Bridge was the foundation of many people's lives. When it became toll-free in 1987, bridge travel was much easier, because people did not have to be sure to have cash on hand or a voucher in the glove box. Traveling across the bridge became engrained in people's daily routine. Those who were born after its opening in 1929 could not imagine what life would be like without it.





**LAKE CHAMPLAIN BRIDGE THROUGH THE YEARS 1929–2009**

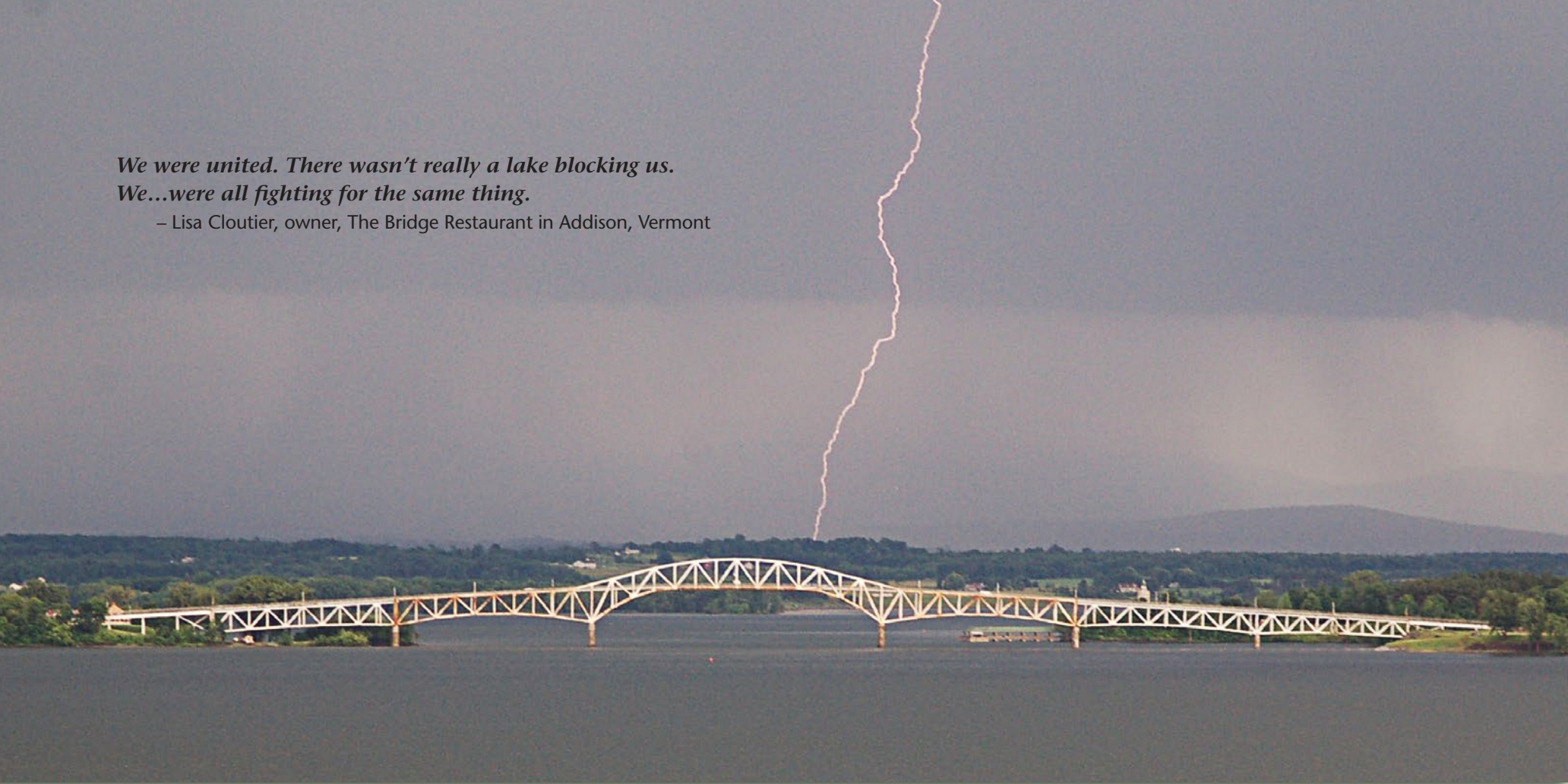






*We were united. There wasn't really a lake blocking us.  
We...were all fighting for the same thing.*

– Lisa Cloutier, owner, The Bridge Restaurant in Addison, Vermont



Courtesy Reverend Scott D. Fobare

## DECAYING BRIDGES ABOUND

### THE DETERIORATION OF THE AGING LAKE CHAMPLAIN BRIDGE

is not an isolated case. From coast to coast, America's infrastructure is crumbling. According to the United States Department of Transportation, more than 150,000 bridges, or one in every four, need repair or replacement, and nearly one-third of America's major roads are in critical condition. The American Society of Civil Engineers has given the nation's infrastructure a grade of "D" overall. The economic ramifications of this phenomenon are felt across the country, as Americans face an estimated \$2 trillion price tag to remedy the situation.



The Lake Champlain Bridge, shown here during its 2009 inspection by the New York State Department of Transportation, was affected by a national shortage of funds to maintain infrastructure.  
(Courtesy New York State Department of Transportation)



# Chapter 7: Crisis and Response

**A**S THE LAKE CHAMPLAIN BRIDGE AGED, there were telltale signs it needed attention. Rusty steel, peeling paint and worn concrete were visible to those who crossed it. Yet, it was what could not be seen, cracks in the piers, that led to its closing and demolition.

Throughout its 80-year life, the Lake Champlain Bridge had undergone many repairs. In 2009, a regular biennial inspection of the superstructure identified 24 areas of concern, and work began immediately on those necessary repairs. In late summer, while crews were finishing up repair work on the bridge superstructure, the lake's water level dropped. Engineers on site who were inspecting the steel repairs noticed significant deterioration of some piers at the waterline. What they saw concerned them.

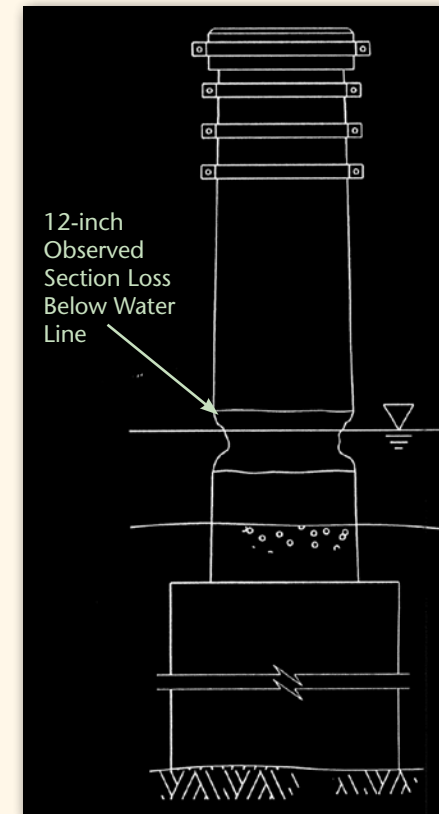
While some deterioration was known, the extent had advanced exponentially since the previous underwater inspection four years earlier. Engineers immediately took cores of the concrete for analysis. New York State Department of Transportation's engineering consultants reviewed the data, concluded the bridge was very fragile and recommended its closure while additional tests were carried out.

With almost no public warning, the Lake Champlain Bridge

was closed to all traffic the afternoon of October 16, 2009 — the day the recommendation was received. Transportation officials from both states and the federal government acted quickly because of their concern.

Within days, a diving team began examining the bridge piers, a year earlier than originally scheduled. Removing layers of zebra mussels attached to the concrete slowed the team's progress. After the team photographed, measured and analyzed the underwater cracks and conducted more testing on the concrete cores, its report was bleak. Cracks in the piers were large, up to five-eighths of an inch wide, in both vertical and horizontal directions. The safety of the bridge could not be assured.

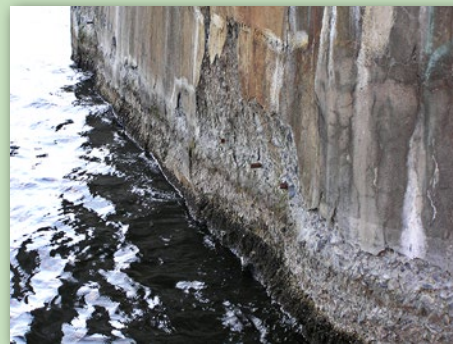
Pier inspections between 1995 and 2005 showed increasing concrete erosion at the waterline; however, the pace of deterioration accelerated rapidly between 2005 and 2009. (Courtesy New York State Department of Transportation)



## DAMAGING LAKE ICE

**MANY POSSIBILITIES ARE CITED AS REASONS FOR THE CONDITION** of the bridge piers. Most likely were the lack of steel reinforcement and lack of granite or other protective “armor” to protect the piers from lake ice. Construction methods chosen to build the piers also may have contributed.

Bridge engineer Ted Zoli, who led the design of the new bridge, believes lake ice played a significant role. Lake bridges are quite uncommon, even today, so the effects of lake ice were generally not understood in 1929. The thermal expansion of ice during cold Lake Champlain winters likely imposed a very strong force against the piers, pushing their limits and undermining their stability. The Lake Champlain Bridge did not have the protective armor often used on river bridges.



Left: The deteriorated condition of Pier 5, most likely caused by ice abrasion, was clearly visible when the water level of Lake Champlain dropped in September 2009. (Courtesy New York State Department of Transportation) Right: A diving inspection in late October 2009 revealed serious cracks in the bridge piers. (Courtesy New York State Department of Transportation)





The abrupt closing of the bridge cut people off from jobs, medical services, families, friends and businesses. (Photo courtesy New York State Department of Transportation)

## Crisis

### THE CRISIS CAUSED BY THE CLOSING WAS MONUMENTAL.

Many residents and other travelers now had an 85-mile land detour over rural roads. The closest ferry, between Ticonderoga, New York, and Shoreham, Vermont, was 12 miles south of the bridge. But that small cable ferry only operated in warm weather and winter was fast approaching. Twenty-minute commutes now took 2 ½ hours each way.

The two existing ferries within 20 miles of the bridge added services and extended their hours to accommodate increased demand. The Basin Harbor Club shuttled pedestrians from Westport, New York to Basin Harbor, Vermont, on its 48-foot vessel *EScape*. Bus routes were added by the states, but all trips were made much longer and more tedious by the closing of the bridge.

A few travelers developed creative solutions, using small boats, kayaks and, later, snowmobiles to cross the lake. But these alternatives were clearly not ideal and, in some cases, were hazardous.

In late October, the states held public meetings at Addison Central School in Addison, Vermont, and Moriah Central School in Port Henry, New York. At those meetings, attended by approximately 900 people, government officials listened to the pain, frustration and anger caused by the bridge closing. Hearing the stories of hardship inspired collaboration among the dozens of agencies involved in finding a solution to the bridge crisis. The message from the public was clear: We need a new bridge as quickly as possible, we need it in the same location and we need a way to cross the lake now.

*The day the bridge closed, we saw a drop in 75 percent of our business. It was like someone just shut off the valve on a faucet, and it just stopped.*

– Lorraine Franklin, owner of the West Addison General Store

## A Difficult Decision

**I**N EARLY NOVEMBER, TRANSPORTATION OFFICIALS FROM New York, Vermont and the federal government consulted with each other and with environmental regulators and historic preservationists to determine a course of action. Preservation of the historic bridge was technically possible. But, the effort would be costly and the result could not be guaranteed as a long-term solution when compared to the cost and life expectancy of a new bridge. More importantly, the risk to construction workers during rehabilitation was considered too great because of the fragility of the bridge.

On November 9, 2009, the New York State Department of Transportation and the Vermont Agency of Transportation announced that the historic bridge would be demolished and a new bridge would be built in the same place. Also, construction of new temporary ferry facilities close to the bridge site would begin immediately to reestablish the transportation corridor depended upon by so many.



Businesses near the bridge were affected severely by its closure. Shortly after the closing, The Bridge Restaurant, a few hundred yards from the approach in Addison, Vermont, took on a new name, The NO Bridge Restaurant, until the new bridge opened in 2011. (Courtesy Gary Wells of Mountainman Photography)



## An Engaged Public

**P**LANNING FOR A COMPLEX PROJECT LIKE THE REHABILITATION or replacement of the Lake Champlain Bridge would typically take at least five years, but this time the process ultimately was shortened to about three months. This was done without bypassing any regulatory steps or approvals. How did this happen?

The accelerated pace of this project was driven by a high level of public interest and engagement. Following the bridge closing, hundreds of people attended meetings, submitted comments through the New York State Department of Transportation's project website and participated in the planning for the new bridge. Each of the hundreds of comments to the website received a timely and personal response by project staff within 24 hours, seven days a week.

Given strong public attachment to the 1929 Lake Champlain Bridge, a beloved regional icon, transportation officials wanted the public's opinion on the design of the new bridge. With both states declaring that the bridge closing had created a state of emergency, time was of the essence. Meetings were scheduled for three consecutive days in December 2009. The first meeting was with historic preservation stakeholders, part of a federally mandated consultation process. The second was a planning workshop with the project Public Advisory Committee — a group of citizens representing many constituencies that had been established early in the planning

process — and some additional invited guests. On the third day, Saturday, December 12, 2009, three public meetings were held in Ticonderoga, New York; these drew approximately 600 people, many of whom made the long trip over from Vermont.

At the first two meetings, five design concepts were presented. Based on feedback from those meetings, a sixth bridge design was created and added — literally overnight — and six possible designs were presented to the public on Saturday. A survey that was conducted over three days during and after the Saturday meetings confirmed that two-thirds of the 3,550 people who offered their opinions preferred this new, sixth design, the modified network tied arch. That concept was selected for the new Lake Champlain Bridge. Many said this design most closely resembled the existing bridge that would soon be demolished.

On January 15, 2010, the states announced that the new concept had been selected and work would proceed quickly toward getting the new bridge designed and built. Over the coming weeks, much more input was sought and offered about the characteristics of the new bridge. Sidewalks, safe passage for bicycles and wide farm equipment, replaceable parts, easy maintenance and protection against rust were suggested as desirable features to build into the new design. All these and more were incorporated.



People packed three separate meetings like this one in Ticonderoga, New York, to review and to comment on six different bridge designs. Bridge designer Ted Zoli's design concept for the new bridge emerged based on input from stakeholders and the public at meetings. (Courtesy New York State Department of Transportation)



*It did feel strange to see or to know that the bridge was going to be demolished and taken away. Kind of felt like a piece of our history, piece of me, piece of my town was going to be taken away.*

– Bruce Peters, Crown Point, New York

## Demolition Day

**R**ESTORING THE LAKE CROSSING WITH A NEW BRIDGE quickly required the swift removal of the existing bridge. This need for speed, along with safety concerns, led to a controlled implosion to bring most of the bridge down at once.

Demolition had to remove the bridge successfully while protecting a nearby home, historic buildings and fort ruins. Working in extremely cold winter weather and on the fragile bridge, a team of demolition experts placed nearly 500 charges, almost 800 pounds of explosives, on the bridge. On December 28, 2009, all were set off within a second of each other. Within 10–12 seconds after the blast, the spans that had stood for 80 years over the lake had dropped into the water.

Crowds lined the shores of Lake Champlain to witness the passing of the bridge. At the moment of detonation, falling snow impaired visibility. Only those within 1,000 feet of the implosion got a good view of the bridge falling into the lake. Most only saw a cloud of gray smoke and heard the boom from the blast.

Those who saw the bridge disappear had mixed reactions. Some wept unexpectedly. Others were hopeful, as they saw the demolition as a sign of progress toward getting a new bridge built. Several said they weren't prepared for the shock; for them, the Lake Champlain Bridge had always been there, a part of their life, and now it was gone forever.

Within an hour of detonation, removal of the steel from the lake began and continued nonstop for months. Barges floated the steel north two miles to Port Henry, New York. More than 4 million pounds (2,000-plus tons) of steel were recovered and recycled, yielding about \$680,000 for the value of the recycled steel. A few pieces were salvaged for display and some pieces were saved for forensic study. Most were recycled and sold as scrap metal.

*I cried when the bridge went down....When the button was pushed and the bridge actually went down, my overall reaction was "Oh, my God, it's actually gone."...I just started to cry, and I know I wasn't the only one.* – Lorraine Franklin, local business owner



The press corps awaits the demolition at Crown Point. (Courtesy Eric A. Bessette)

*It was probably a bittersweet day I think — sad to see such a historic structure come down in such a short time...kind of sad... but also was kind of like a new beginning to the next step.*

– Timothy Kayhart, Vermont farmer

*It was really a heart wrenching experience when they blew that bridge up. It was like losing an old friend.*

– Tom Scozzafava, Town of Moriah Supervisor



Demolition of the Lake Champlain Bridge on December 28, 2009, was traumatic for many. (Courtesy New York State Department of Environmental Conservation)

*I think a lot of people took it for granted until it was gone... and then they realized what a sweet old gal she was.*

– Dan Lee, former Lake Champlain Bridge worker and local resident



## RECOVERING THE STEEL

**MUCH OF THE STEEL WAS LIFTED OUT OF THE LAKE WITH GRAPPLES,** resembling long backhoes. In the deepest parts of the lake, up to 100 feet below the surface, dive teams descended into the frigid water, rigged the steel with cables, attached it to cranes and then lifted the pieces of truss and beam steel out of the water.

Side-scan sonar and ground-penetrating radar were used to scan the lake bottom for pieces of steel. A few smaller pieces that escaped this process were found later during new bridge construction. If any steel remains, it is buried deep in the very soft mud of the lake bottom.



Months after the big blast that took the bridge down, the remains of the bridge were still being salvaged and removed. This section at the Vermont shoreline shows one of the last pieces to be dismantled. (Courtesy Fitzgerald & Halliday, Inc.)

A pile of recovered steel pieces is ready for processing.  
(Courtesy New York State Department of Transportation)



A grapple removes steel from Lake Champlain. Workers operated throughout harsh winter conditions to remove all the steel so that construction of the new bridge could begin unimpeded in the spring. (Courtesy ©2011 Mr. Robin Knapp. All rights reserved)



A crane lifts a large piece of steel from deep water rigged with cables attached by divers.  
(Courtesy New York State Department of Transportation)







Construction crews worked days, nights and weekends to hastily build ferry landings at Crown Point (pictured above) and Chimney Point. Ferries had not operated between these two sites since the opening of the bridge in 1929. (Courtesy ©2011 Mr. Robin Knapp. All rights reserved)

## Back to Boats

**F**ERRY SERVICE BETWEEN CROWN POINT AND CHIMNEY Point opened on February 1, 2010, a remarkable three months after the decision to install a temporary ferry system. Construction crews overcame many challenges to complete the installation of ferry facilities quickly. Harsh winter weather, difficult topography on both sides and lake mud described by engineers as “yogurt” or “pudding” were only a few of the challenges. Engineers also worked very closely with state and federal agencies to minimize impact to historic, archaeological and environmental resources.

Opening day was a great relief for many. The ferry service restored some degree of normalcy to travelers while the new bridge was being built.

The ferry service was operated by the Lake Champlain Transportation Company 24 hours a day, seven days a week and carried all manner of vehicles and cargo, from foot passengers who wanted to check out the latest advances of new bridge construction to 18-wheelers and farm equipment.

From February 1, 2010, to the new bridge’s opening on November 7, 2011, the ferries carried 1,544,477 vehicles, an average of 2,395 vehicles per day. In total, 2.6 million people crossed on the free ferry. The service was subsidized by the two states for a total of \$15,635,560, an average of \$24,241 a day.

*It was 108 days with no traffic out here. But, when you look at it in retrospect, that was pretty quick for two states to move quickly to put in the infrastructure for ferries. And they did move quickly.*

– Lisa Cloutier, The Bridge Restaurant



The first ferry passengers were greeted by members of the Lake Champlain Bridge Coalition, a group that tirelessly advocated for a speedy response to the bridge closing. (Courtesy Mike Sweeney)



On February 1, 2010, the temporary ferry service opened to the public. (Courtesy ©2011 Mr. Robin Knapp. All rights reserved)





## Every Oar in the Water

**FINDING A WAY TO RESTORE THE LAKE CROSSING** quickly, first by boat and then by bridge, took extraordinary effort by countless individuals, organizations and government agencies.

The two states, federal, local and regional agencies made an unprecedented collaborative effort to resolve issues. Concerns about the proximity of historic resources next to the bridge in both states were addressed through cooperative agreements guided by Section 106 of the Historic Preservation Act and lots of dialogue.

Preservationists were pleased that bridge designers could fit a wider bridge at the same location without having a negative impact on the two state historic sites. Archaeologists were on site during construction to monitor activities and could sift through excavated soils looking for buried artifacts.

Working together, engineers and historic preservationists learned about each other's needs and did their best to accommodate the new bridge and temporary ferry in a way that was satisfactory to all.

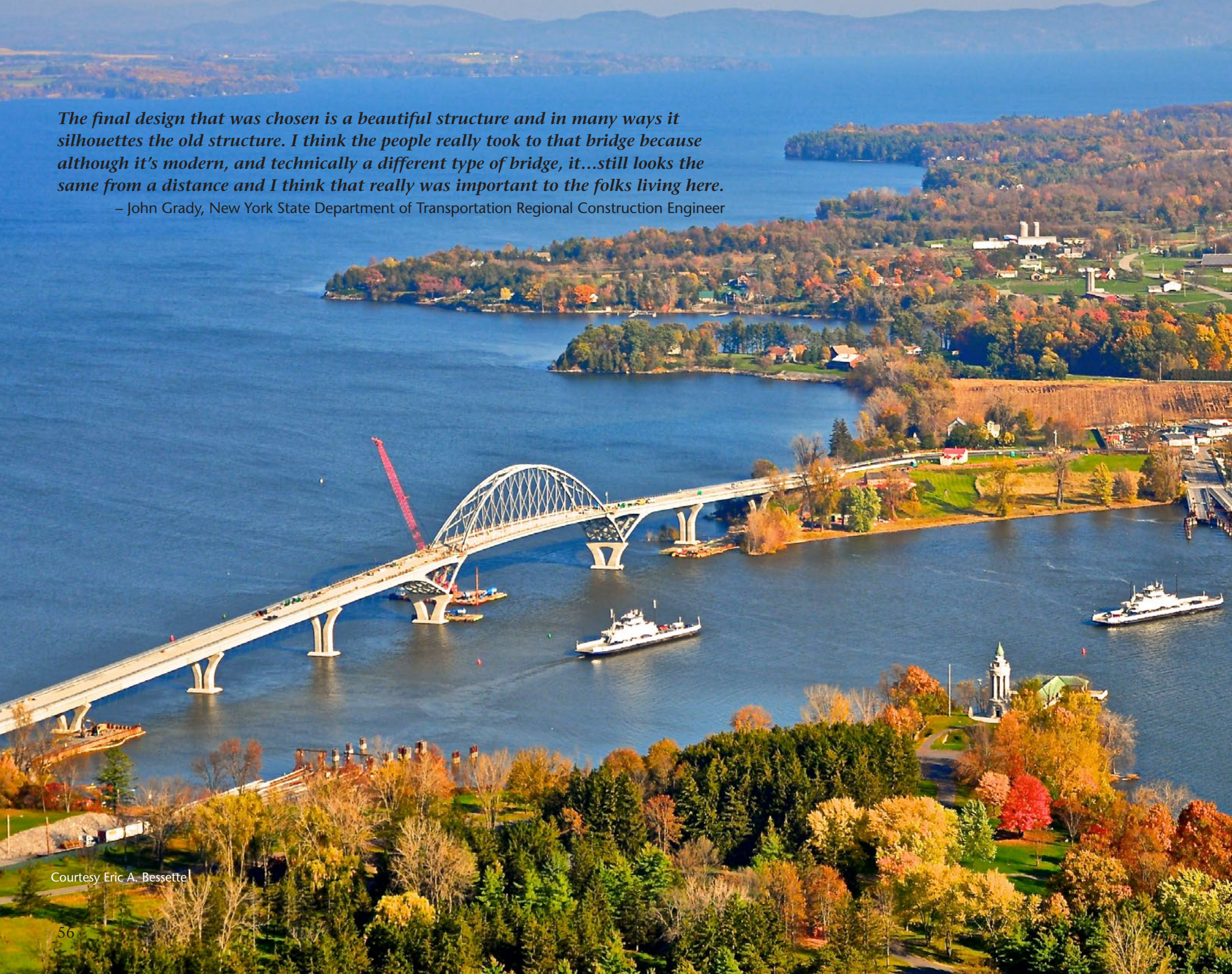
Designers were able to use visualization tools to show how the new bridge would look in the landscape. Images to the right show a photograph of the 1929 bridge approach from Chimney Point State Historic Site and a computerized rendition of the new bridge approach from the same location. (Top and bottom, courtesy New York State Department of Transportation; middle, courtesy HNTB Corporation)





*The final design that was chosen is a beautiful structure and in many ways it silhouettes the old structure. I think the people really took to that bridge because although it's modern, and technically a different type of bridge, it...still looks the same from a distance and I think that really was important to the folks living here.*

– John Grady, New York State Department of Transportation Regional Construction Engineer



Courtesy Eric A. Bessette



# Chapter 8: The New Bridge

*The new bridge is an example of what I hope to be the future of arches.* – Theodore “Ted” Zoli, III, engineer and designer of the new Lake Champlain Bridge

**T**HE NEW LAKE CHAMPLAIN BRIDGE OPENED ON November 7, 2011, almost two years to the day after transportation officials announced that a new bridge would be built to replace the 1929 Lake Champlain Bridge. Those who attended the opening ceremony were in a celebratory mood. After speeches by elected officials and community members, about 1,000 people streamed onto the bridge on foot, bicycles, motorcycles and in antique cars, taking in the spectacular views on that sunny, warm November day.

The connection people felt with the new bridge was palpable. “The Bridge” was a lead story in the lives of local residents for the previous two years and the community played a vital role in helping to shape its outcome. They had consistently expressed a strong desire for a long-lasting, easy-to-maintain bridge so that they would never have to face a closed crossing again.

The new bridge incorporates easy-to-maintain materials, protective coatings on its steel and cables, armor to protect the piers and bridge pieces that can be replaced when necessary without closing the bridge. The bridge has sidewalks on both sides, shoulders for bicycle traffic and safety and is wide enough to accommodate farm equipment.

As the old bridge came down and the new one went up, construction progress was very much in the public eye. The New York State Department of Transportation webcams streamed the progress online. People crossing the lake on the ferry, only a few hundred feet away, monitored progress daily. They watched the V-shaped concrete piers rise from the lake and the steel girders for the bridge deck be connected, piece by piece. Seldom is the public given such an up-close and constant “inside” view of a bridge under construction. Just as the local population felt great ownership of the 1929 bridge, they assumed that same ownership of the new bridge.

## OLD INSPIRES NEW

**DESIGN TECHNIQUES USED IN THE REGION’S 19TH-CENTURY** covered bridges were replicated in the new Lake Champlain Bridge. The crossing wood beams of the 1870 Chiselville Bridge, a Town lattice truss bridge in Sunderland, Vermont, created a very strong bridge. Crisscrossing cables of the new bridge are reminiscent of the diagonal planks in the lattice truss design patented by Ithiel Town in 1820.



Left: The Chiselville Bridge in Sunderland, Vermont. (Courtesy Vermont Agency of Transportation) Right: The cable lattice of the 2011 Lake Champlain Bridge (© Andy Ryan, courtesy HNTB Corporation)

*It’s a network arch and by network it means that the cables cross at least twice. This represents a more efficient system in many ways but also a system that’s more resistant to damage.”*

– Theodore “Ted” Zoli, III,  
engineer and designer of the new Lake Champlain Bridge



The arch for the center bridge span was assembled in Port Henry, New York, under the watchful eyes of many local residents. The daylong installation of the completed arch attracted many spectators and the media, as it was floated into position below the bridge and slowly lifted into place.

The new Lake Champlain Bridge may have as important a legacy for bridge engineering as the 1929 bridge. Ted Zoli, lead designer of the new Lake Champlain Bridge, used a unique “network tied arch” design, featuring cables that cross at least twice in the new bridge arch. This type of arch is lightweight and is an efficient use of material. It is safer and more redundant than a truss bridge, with replaceable cable components. It is possible that this arch design may be embraced by many other engineers, becoming a prototype for future bridges.



The speedy construction of the new Lake Champlain Bridge was news in itself, illustrated by this cartoon featuring “Champ” the mythical Lake Champlain monster. (Courtesy Mark Wilson at EmpireWire.com)

## THE WORST WEATHER



Lake Champlain overflows its banks in May 2011.  
(Courtesy Chimney Point State Historic Site)

**WHEN FLATIRON CONSTRUCTION OF COLORADO TOOK ON** the challenge of building a bridge in 500 days, its staff knew working through Lake Champlain winters would be challenging. Bitter Lake Champlain winds are legendary, but the 2011 weather was one for the record books.

Heavy snowfall during the winter, followed by 20 inches of rain between March and May, led to extraordinary flooding. Lake Champlain remained above flood stage for 67 days straight. On May 6, 2011, it rose to its highest level ever at 103.27 feet, more than five feet above the average in May. Lake flooding delayed the opening of the bridge by about three weeks.



On January 27, 2011, in freezing temperatures, the first steel girder of the bridge was placed on a pier at Chimney Point.  
(Courtesy Chimney Point State Historic Site)



## A New Arch Rises Over Lake Champlain

Floating of the 402-foot arch began before dawn on August 26, 2011, left. Throughout the day people along the shore and in boats watched the arch move to its final destination. (Left, courtesy Clough Harbour & Associates (CHA); below, courtesy New York State Department of Transportation)



A young boy “lifts” the arch under construction in Port Henry while visiting the Crown Point State Historic Site. (Courtesy James Boni)



It took 18 hours for the arch to be floated two miles, lifted and secured into its final position. (Courtesy New York State Department of Transportation)



The design of the 2011 Lake Champlain Bridge had to allow sailing vessels with high masts, like the schooner *Lois McClure* seen here passing under the new bridge. (Courtesy Dean Percival)



## What Lies Beneath

**B**UILDING A BRIDGE OVER A RICH ARCHAEOLOGICAL SITE presented a challenge for designer Charles Spofford in 1929 as it did 80 years later. In both instances, great care was taken not to disturb remains of human habitation that go back more than 9,000 years.

In establishing both the new bridge and temporary ferry facilities that were used to get people across the lake until the new bridge opened, historic preservationists and state archaeologists in New York and Vermont worked closely with engineers to minimize and/or avoid disturbance of archaeological sites.

To build the ferry landing in New York, a steep cut in an embankment was needed. All fill removed was stockpiled carefully so it could be put back into its original place. In Vermont, the topography and approach was different. Fabric and then fill were laid directly on the existing ground, preserving the visual landscape and archaeological resources beneath.

An in-depth archaeological survey of the bridge project area was carried out before bridge construction commenced. However, throughout bridge construction state archaeologists continuously monitored the on-land excavation work. Digging with heavy equipment was done slowly; as objects were uncovered, archaeologists were on site to inspect what was being disturbed below ground.



The University of Vermont's Consulting Archaeology Program was contracted to carry out the archaeological work on the Vermont side of the span. (Courtesy Chimney Point State Historic Site)

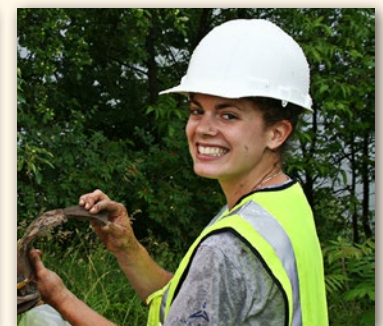
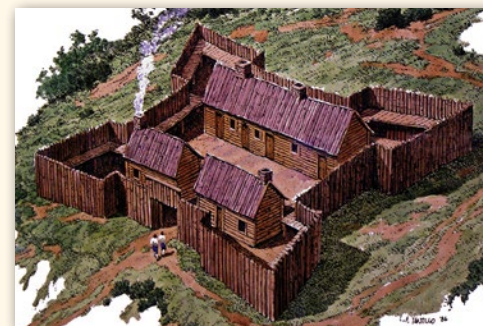
Right: Artist's depiction of the 1731 French fort built at present-day Chimney Point (Courtesy Crown Point State Historic Site)  
Far right: University of Vermont archaeology student holds redware pottery made by Moses Bradley found at Chimney Point. (Courtesy University of Vermont Consulting Archaeology Program, Burlington, Vermont)



University of Vermont archaeologists excavated an H-shaped stone chimney foundation at Chimney Point; concrete foundation of 1929 bridge is upper right. (Courtesy University of Vermont Consulting Archaeology Program, Burlington, Vermont)

Nothing significant was uncovered in New York, but the story was quite different in Vermont. In March 2010, removal of the old bridge led to a major find. The likely remains of the H-shaped hearth and a chimney section of the 1731 French fort were unearthed from an area directly under the 1929 Lake Champlain Bridge. Until then, the exact location of this fort had remained a mystery for 249 years. Also found nearby were redware pottery pieces and broken kiln tools from Moses Bradley's 1790s-era pottery workshop at Chimney Point.

Archaeological discoveries resulting from the bridge project have expanded what is known about people who lived at Chimney Point, from Native American inhabitants to late 18th-century settlement and fortifications. They will be shared with the public through interpretive displays at the Chimney Point State Historic Site.







People, not cars, were the first to cross on opening day, November 7, 2011. Historic autos were the first cars to cross the new bridge. (Courtesy Eric A. Bessette)



The morning after its opening, November 8, 2011, the bridge and its reflection are captured by the New York State Department of Transportation's webcam. (Courtesy New York State Department of Transportation)

## Opening Day, November 7, 2011

**T**HE NEW LAKE CHAMPLAIN BRIDGE opened on November 7, 2011, 752 days after the old bridge closed. Presiding over the ribbon-cutting were New York State Lieutenant Governor Robert Duffy and Vermont Governor Peter Shumlin. The ceremony was attended by nearly 1,000 people, including several '29ers who had been present for the opening of the 1929 bridge.



New York State Lieutenant Governor Robert Duffy, left, and Vermont Governor Peter Shumlin, right, ride on the first car to cross the bridge. (Both photos courtesy Eric A. Bessette)





Charles Spofford's Lake Champlain Bridge design influenced more than 25 major bridges constructed between 1932 and 1977. Pictured here are the Piscataqua River Bridge, between Portsmouth, New Hampshire, and Kittery, Maine, constructed in 1972, left, and the John Greenleaf Whittier Bridge, between Amesbury and Newburyport, Massachusetts, constructed in 1951, right. (Courtesy Fitzgerald & Halliday, Inc.) The 1929 historic Lake Champlain Bridge, pictured below, provided the inspiration for both bridges. (Courtesy Vermont State Archives and Records Administration)

*The Lake Champlain Bridge is significant on a national scale. It's really the first of its kind in America, and, thus, its historic significance needs to be considered in a much broader context.*

– Robert McCullough, University of Vermont  
Professor of Historic Preservation

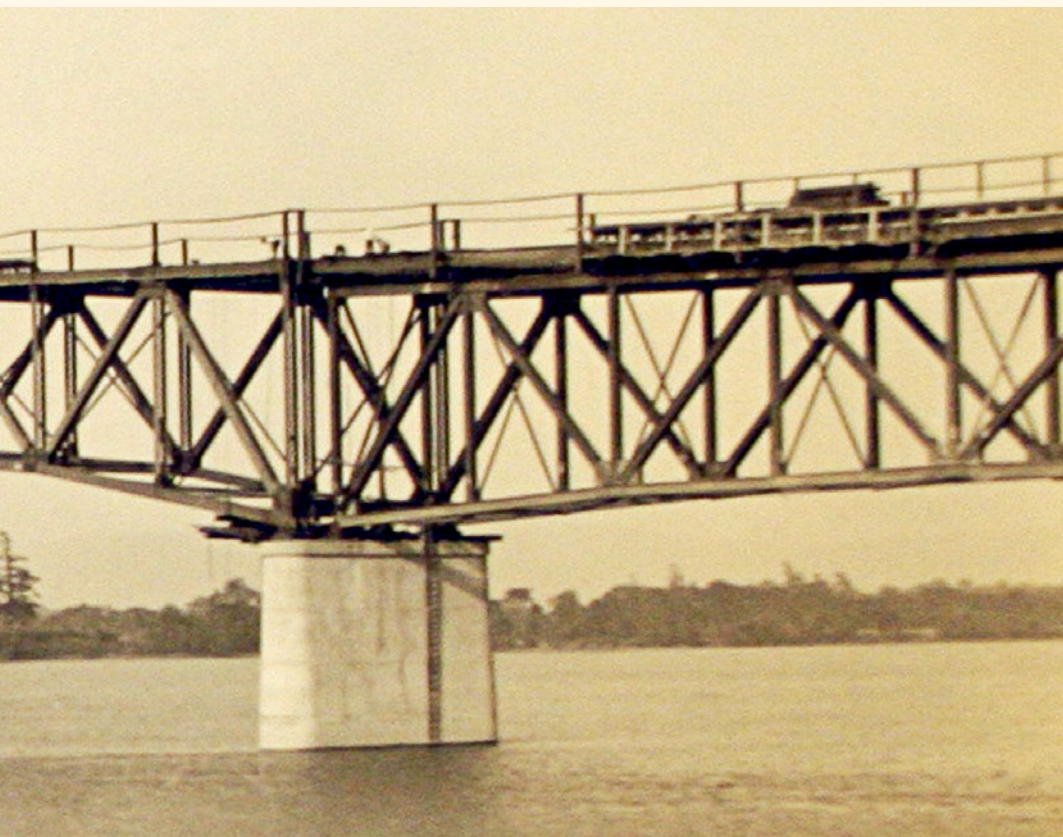




# Chapter 9: The Legacy of the 1929 Lake Champlain Bridge

**T**HE LAKE CHAMPLAIN BRIDGE WAS A NATIONALLY SIGNIFICANT engineering landmark and one of the country's most technologically inventive and aesthetically sophisticated designs for highway bridges of its period. Charles Spofford's engineering solutions and graceful design ushered in an era for long, continuous-truss highway bridges. His ability to fluidly meld under-deck trusses with a through-truss was visually appealing and an engineering milestone for truss bridges.

In 2009, the historic Lake Champlain Bridge was placed on the National Register of Historic Places. It was nominated as a National Historic Landmark but did not achieve this designation before it was demolished in December 2009. Its legacy lives on in the national landscape through bridges modeled after its design. Across the United States, from New York to Washington State to Texas, bridges still stand that are a direct reflection of the aesthetics and engineering advances of the 1929 Lake Champlain Bridge.



## INFLUENCE AND INSPIRATION

### THE LEGACY OF THE LAKE CHAMPLAIN BRIDGE IS ALIVE IN BRIDGES NATIONWIDE

1. Pulaski Skyway, New Jersey (1932).
2. General John Sullivan Memorial Bridge, New Hampshire (1934).
3. Bourne Bridge, Massachusetts (1934).
4. Sagamore Bridge, Massachusetts (1935).
- 5 & 6. South Grand Island Twin Bridges, New York (1935).
7. Cordell Hull Memorial Bridge, Tennessee (1936).
8. Governor Harry Nice Bridge, Maryland and Virginia (1940).
9. Susquehanna River Bridge, Maryland (1940).
10. George Sellar Memorial Bridge, Washington (1950).
11. George C. Platt Memorial Bridge, Pennsylvania (1951).
12. John Greenleaf Whittier Bridge, Massachusetts (1951).
13. Chesapeake Bay Bridge, Maryland (1952).
14. Vincent R. Casciano Memorial Bridge, New Jersey (1956).
15. Delaware River Turnpike Toll Bridge, Pennsylvania and New Jersey (1956).
16. Corpus Christi Harbor Bridge, Texas (1959).
17. Summit Bridge, Delaware (1960).
18. Vantage Bridge, Washington (1962).
19. Bridge of the Americas, Panama Canal (1962).
20. & 21. Hamilton Fish Newburgh-Beacon Bridges, New York (1963: North Span and 1980: South Span).
22. Gerald Desmond Memorial Bridge, California (1968).
23. Piscataqua River Bridge, New Hampshire and Maine (1972).
24. Francis Scott Key Bridge, Maryland (1977).



*At the kitchen table we spoke of it as “the bridge,” not the Crown Point Bridge or anything else...and it was almost like saying “our bridge” because it truly was a member of our family.*

– Dan Lee, son of Warren Lee,  
Lake Champlain Bridge maintenance worker

*The way it sat in that landscape and seemed to respond to the mountains around it and the lake over which it passed...over the years people built up a great deal of affection for it.*

– Steven Engelhart, Executive Director,  
Adirondack Architectural Heritage



Courtesy Suzanne Maye

*My grandfather had a boat and we’d always go out fishing and we’d go up close to the bridge and I was always amazed by the size and complexity of it.*

– James Boni, New York State Department of Transportation  
Project Manager for the Lake Champlain Bridge Project



## **The Magic of the Lake Champlain Bridge**

**T**HE 1929 LAKE CHAMPLAIN BRIDGE WON THE hearts of people near and far for 80 years. Residents and visitors alike came to appreciate its significance as a landmark, tourist destination, lifeline and an engineering wonder. To many, it was like a family member, always there when you needed it. The physical structure is now gone but the legacy of the historic Lake Champlain Bridge is alive in countless memories and stories.

Courtesy Lake Champlain  
Maritime Museum

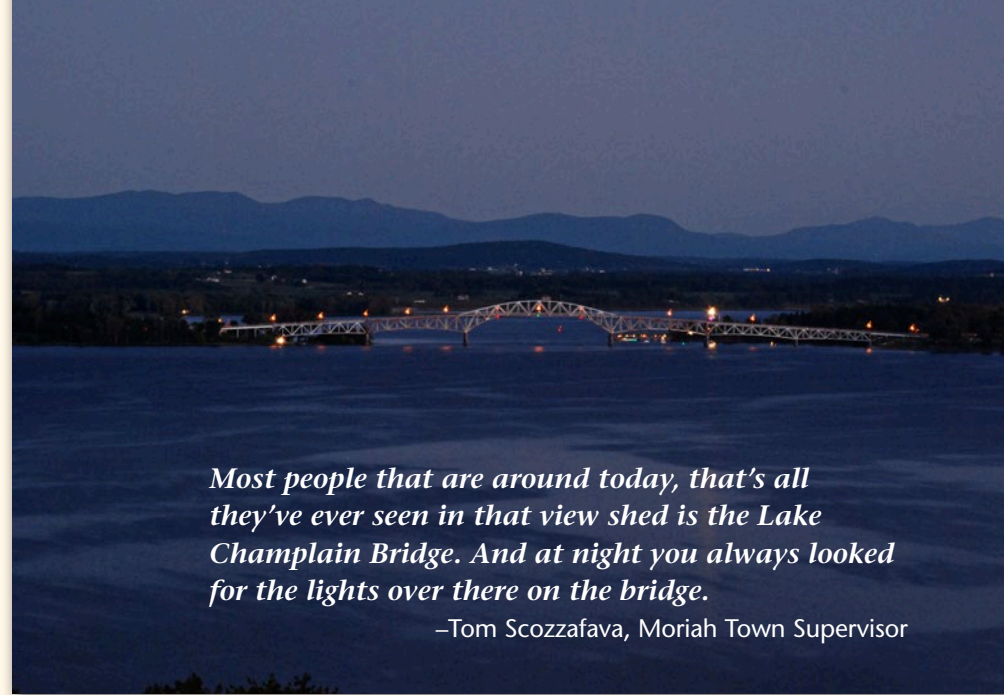




Courtesy Jay Reopel

*I used to take my kids near the bridge over by the dock...we would have a family reunion or get-togethers over there...my kids learned to swim over there, my grandchildren did...it was just a fixture of all of our lives around here.*

– June Tur, attendee at the 1929 bridge opening

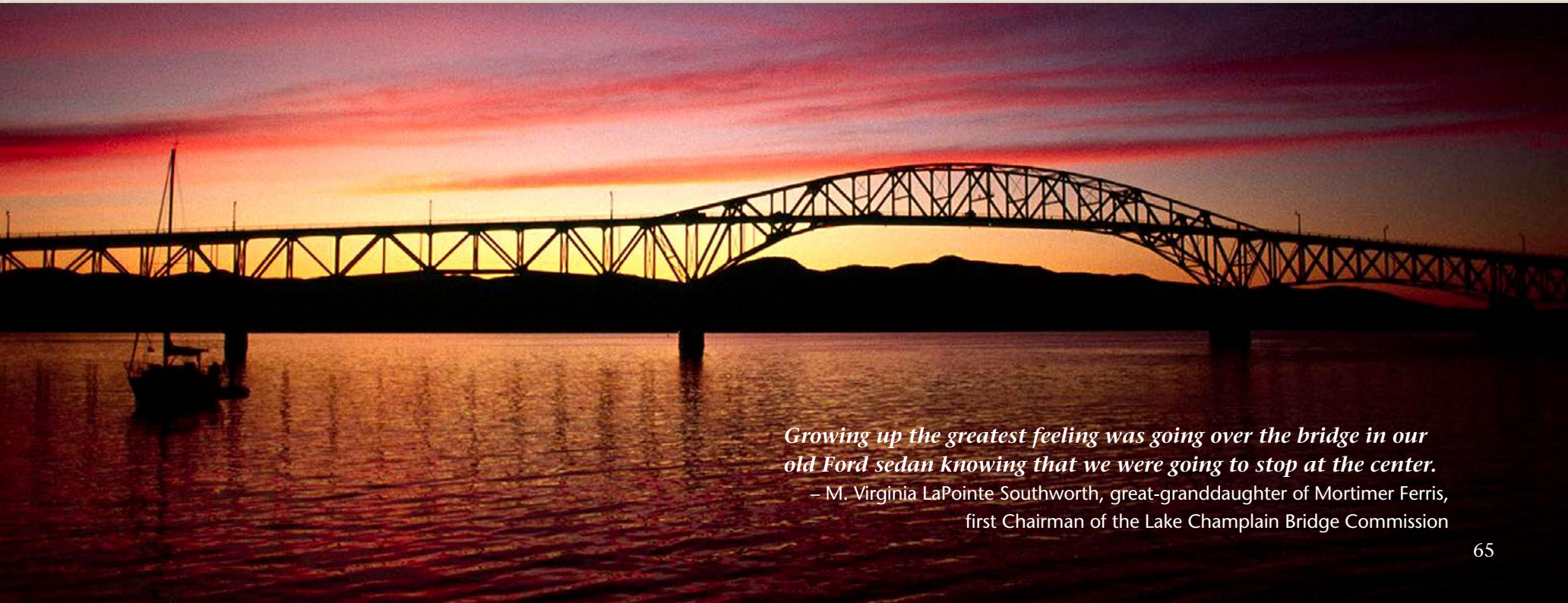


*Most people that are around today, that's all they've ever seen in that view shed is the Lake Champlain Bridge. And at night you always looked for the lights over there on the bridge.*

–Tom Scozzafava, Moriah Town Supervisor

Courtesy Glenn Estus, Westport, New York

Courtesy Ed Burke, Saratoga Springs, New York



*Growing up the greatest feeling was going over the bridge in our old Ford sedan knowing that we were going to stop at the center.*

– M. Virginia LaPointe Southworth, great-granddaughter of Mortimer Ferris,  
first Chairman of the Lake Champlain Bridge Commission



Opening Day, August 26, 1929



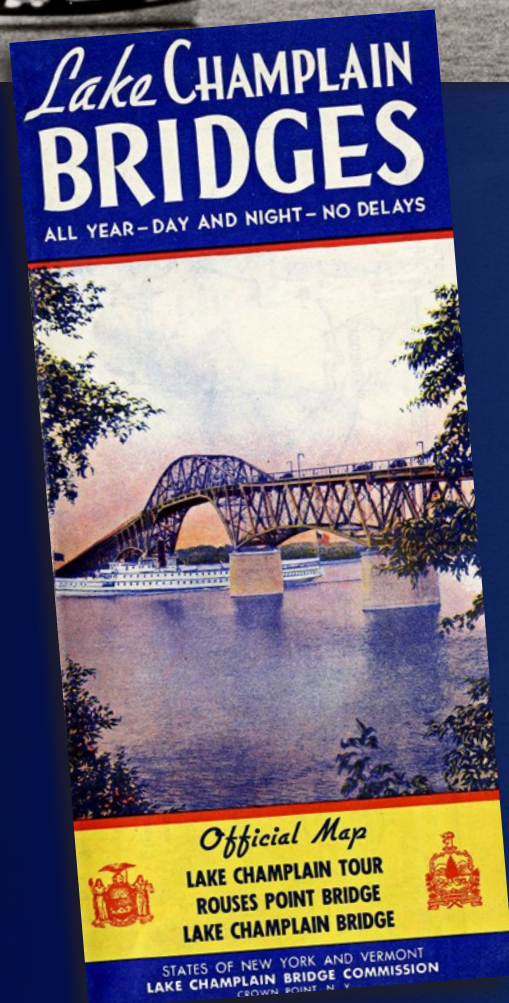
Courtesy Moriah Historical Society

## Spanning the Decades The Lake Champlain Bridge Story

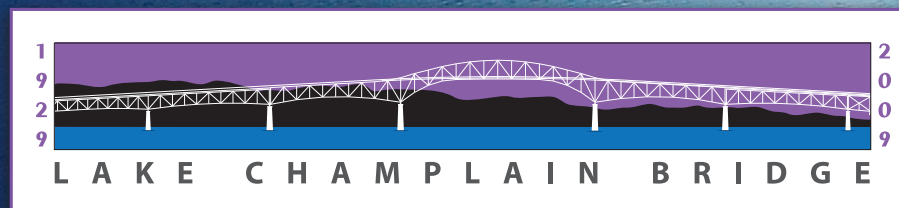
In these pages you will find the story of the Lake Champlain Bridge, from its pioneering design and rapid construction, through its years of faithful service and finally its demise in 2009. No publication can capture the grandeur or all of the personal tales that accompanied its storied life. These pages present a glimpse into the life of a landmark bridge that for 80 years helped to define the Champlain Valley.



Courtesy Thomas Hughes



Courtesy Special Collections,  
University of Vermont Libraries



Cover photo: The Lake Champlain Bridge hours before closing on October 16, 2009. (Courtesy Eric A. Bessette)